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## ORIGINAL DEPARTMENT.

### LECTURE.

#### SOME POINTS RELATING TO EXCISION FOR HIP-JOINT DISEASE.

BY C. B. NANCREDÉ, M. D.,

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delphia Polyclinic and College for Graduates in  
Medicine.

GENTLEMEN: This case of hip-joint disease presents some special points of interest, which I shall briefly notice. The history illustrates that which too frequently takes place. First in importance is the fact that the disease progressed favorably under treatment, which was therefore dispensed with at too early a period—at a time when, if persevered in, permanent recovery would have probably ensued. Second in importance is the manifest fact that, had this case terminated by a cure, even without any true articular ankylosis—much more had this existed—a degree of deformity would have persisted, for which there was no necessity. The vast majority of surgeons (and this little patient has been treated by some of the best in the country, having been in more than one well-known children's hospital) consider their active duty over in a case of hip-disease when the child is placed in bed with a weight attached for extension. Now mark what occurs. While the joint's movements are painful, the child will lie down; but just so soon as the treatment shall have relieved these symptoms, the patient sits up in bed, *i. e.*, keeps the joint flexed, thus giving full play to the ilio-psoas, rectus femoris, and tensor vaginæ femoris muscles to become contracted permanently, and they become

so. Mark still further that pressure over the region of the diseased joint creates, at least, discomfort, so that the child rests chiefly upon the sound buttock, thus favoring and increasing the deformity, resulting from ankylosis in the adducted position; so that from these two causes, when the patient gets up the surgeon is disappointed at finding a marked deformity. This was due often also to the omission of lateral support (as by sand-bags) to the limb as it lay in bed, and that no "cradle" was ordered to ward off the pressure of the bed-clothes from the weakened muscles.

My practice is always, under ether, to put the limb as nearly as possible in a perfect position; dividing muscles if necessary, but of course using nothing beyond gentle—although firm—pressure in effecting my point. I do this, not only on account of the future usefulness of the limb, but to relieve pain. Many of the most painful joints when "malposed" become comparatively painless when placed in good position. I then keep the child on its back by means of a long splint on the sound side, extending from the axilla to the foot. A pad under the diseased buttock so as to exert, by the extension, a special stretch on the ilio-psoas muscle, and arrangement of the line of traction of the extension, so as to gradually overcome the adduction, will effect what the first reposition left undone. When I treat a case from the outset, I do not allow this malformation to occur, because I get my patients up with a splint, high slide, and crutches, in a few weeks, keeping them in bed only until the more acutely painful condition of the joint is relieved.

The third point of interest is, that this child's

joint, under ether, seems fairly free in its movements, and that its surfaces did not seem disorganized until I made such free and continued movements as to displace the granulation tissue from the inflamed and carious bone, which was more or less covered in by it. This is not uncommon, even with the inexperienced. A fatally disorganized joint in which suppuration has occurred may deceive, by its apparently smooth, free movements and the absence of bony grating, the tyro into thinking that the profuse discharges and numerous sinuses after all are the result of abscesses not communicating with the joint.

"Starting pains" are beginning to trouble this little patient, and are of peculiar significance. Just in the act of falling asleep, or even while quietly slumbering, the child will suddenly awake with a shriek and a start, and clap its hands to the sore joint, now the seat of an intense though fleeting pain. Perhaps even before the nurse can get to the bedside, the little child again sleeps. By this symptom is indicated hyperæmia and even ulceration of the sublamellar tissues, causing, through direct nervous connection, these reflex clonic spasms of the surrounding muscles.

Commencing amyloid change of the liver was also detectable in this child, and a profuse, exhausting diarrhoea, with hectic, clearly indicated operation or a rapidly fatal termination.

I accordingly excise this joint, and you see that the femoral head is most extensively diseased, and this sinus is the remains of an old inter-pelvic abscess, the result of extensive disease of the acetabulum, the bottom of which is perforated, while you see this small fragment which I remove in the form of a sequestrum.

As to the indications for excision in hip disease, the history of this case shows that if after keeping the joint at rest by quiet in bed with extension, followed by the promotion of exercise in the open air—the joint being still kept at rest—good food, tonics, and change of air, notwithstanding abscesses form, the health fails, hectic, diarrhoea, starting pains, and commencing amyloid disease show themselves, experience proves that the joint is hopelessly damaged, and that excision or amputation alone can, in most cases, save life.

If extensive amyloid trouble of the liver and kidneys be present, amputation is the better procedure; but when these conditions are incipient, excision is not contra-indicated. This child has since done well.

[The professor described at some length the

splints that he preferred in the treatment of morbus coxarius, and went into details that have been omitted for want of space.—REPORTER.]

## COMMUNICATIONS.

### THE THERAPEUTICS OF HOT WATER.\*

BY CHARLES P. KING, M. D.,

Of Newark, Ohio.

The subject of this paper is the use of hot water as a therapeutic agent. There are many points of interest that I will be obliged to omit entirely, and others I can allude to only incidentally, as the time allotted me is limited. I would like to discuss at length the various modes of administering hot water, such as the hot-air, Turkish, steam, and medicated baths, the mercurial bath, and some others; and while they have a very important bearing on this subject, they are rather beyond the scope of this paper. The use of water in some form or other in the treatment of disease dates back to a very early period.

Our earliest writers make mention of it, and from the days of Hippocrates and Galen down to the present it has had its adherents, and many look upon it as the great panacea for "all the ills that flesh is heir to."

At different times it has been carried to extremes, and has been the instrument in the hands of quacks and charlatans of doing much evil in the world. There are some present who remember what a hold the Thompsonian system had upon the people some years ago, and, in fact, it almost superseded all other systems of treatment for a time; but like many other isms of the kind, has had its day, and been long since consigned "to the tomb of the Capulets."

That the use of water in many of its forms is highly beneficial in the treatment of disease, no one, I think, will for a moment deny. But it should have a place among our other remedies as being but one of the many means by which we control disease, and we should be very guarded lest we run to extremes in our advocacy of it.

There is fashion in medicine like in everything else; certain modes of treatment are popular because it is fashionable to use them; we have our fashionable doctors and our old foggy doctors; the former being carried away by everything that is new and fashionable—the latter are looked upon as relics of the dark ages whose opinions are entitled to no respect whatever at the hands of their fellowman.

\* Read before the Licking County Medical Society.

While many systems of medicine have had their day and been discarded from use, the use of water as a therapeutic agent seems to have withstood the ravages of time, and to-day stands in the front rank as a remedy, both in medical and surgical practice. It is only within the last decade, however, that hot water, in contradistinction to cold, has become so generally used. In fact, it has superseded entirely the use of cold water in very many cases.

For convenience of discussion, I will divide my subject into three heads :

1. Use of hot water in medical practice.
2. In surgical practice.
3. In obstetrical practice.

There are many forms of disease in which hot water is highly efficacious.

In fevers, for example, many prefer hot water sponging to the cold—the hot to the cold pack.

In all the exanthematous diseases, hot water is not only soothing to the patient, but is also a great benefit in reducing the temperature.

In infantile convulsions, great benefit is to be derived from the hot bath ; in inflammatory affections of the abdominal organs, the use of hot applications has unquestionable value ; in peritonitis, for example, cloths wrung out of hot water, applied over the abdomen, are of great service, not only in allaying local inflammation, but also the general temperature of the body is thus reduced. In inflammatory affections within the chest, such as acute pleuritis and pneumonia, the hot, wet packs are very serviceable ; in habitual constipation, and also many forms of chronic dyspepsia, drinking freely of hot water is of great benefit. Some of the most obstinate cases of constipation have been relieved in this way. As a remedy in dyspepsia, I cannot speak too highly in its praise. I have now under my professional care several chronic cases of dyspepsia which have resisted everything in the way of medicines, and which are now entirely cured by the use of hot water alone. I advise drinking a good-sized coffee-cupful of hot water (as hot as can be borne) three times a day, one half hour before each meal.

In some forms of nervous headache the drinking freely of hot water is of great service ; but very recently I saw a statement that many of our members of Congress have been drinking hot water several times a day, instead of their usual potations of whisky.

In some forms of headache, accompanied by determination of blood to the head, the use of hot water freely to the head is of great benefit.

There are many other conditions of the system in which hot water is of great service in medical practice, but for want of time I will be obliged to omit mention of them.

The uses of hot water in surgical practice are both numerous and important. In surgery, as in every other department of our profession, simple methods of treatment commend themselves to the careful practitioner. For this purpose I desire to direct your attention to an agent simple, cheap, and of easy application ; this is the use of hot water.

It is to the value of hot water as a *hemostatic* agent, however, that I wish to direct chief attention, especially to its power when the bleeding is from small vessels, or of that character denominated capillary bleeding or oozing—a fact first brought prominently to the notice of the profession by Dr. Emmet, of New York, in his great work on gynecology.

He has been magnanimous enough, however, to give the late Dr. Pilcher, of Detroit, Michigan, the credit for having first called his attention to it ; he says “that while operating in 1859 to close a vesico-vaginal fistula, where free incisions were necessary, the progress of the operation had been greatly delayed in consequence of oozing of blood ; this could be temporarily checked by pressure and ice, but in a few moments reaction would take place and the bleeding be as great as ever. Dr. Pilcher being present, he suggested that a sponge probang be dipped in hot water and applied several times to the bleeding surface. This was done, and the bleeding promptly arrested.

Cold water and ice even are much less efficient in checking hemorrhage than hot water. The immediate effect of cold is to contract the bleeding vessels, but this contraction is very soon followed by the opposite condition, dilatation ; one that continues for a considerable period, and one that favors further hemorrhage.

Besides, it is a fact well established that prolonged cold lowers the reparative power of tissues. The immediate effect of heat is to dilate the vessels, but it afterwards contracts them.

The manner in which hot water arrests hemorrhage is that the clot formed in the mouth of the dilated vessel is held so firmly in position by the subsequent contraction as to prevent its being readily dislodged. One of the principal advantages that hot water has over all other agents employed, is that it does not interfere with the subsequent healing process ; in fact, it is thought by many to promote it. As a dressing for wounds, contusions, and inflamed parts in general, it is

invaluable. The cold-water treatment of wounds is very often highly injurious, the circulation in the wounded parts being too much depressed, which of necessity will hinder repair, and sloughing is often induced.

In ovariectomy there is frequently a good deal of oozing of blood that must be arrested before closing the abdominal cavity. In such cases the frequent application of sponges dipped in hot water will generally promptly arrest the hemorrhage, even in cases where persulphate of iron has failed.

In cases of removal of uterine fibroids, the injection of hot water into the uterus succeeds in arresting hemorrhage which would otherwise require the use of the tampon. After amputations where there is much oozing of blood from stumps, in excision of mammary glands, and various other operations, hot water is of great service.

In hemorrhage from the nose, the injections of hot water have proved of great service in the hands of some surgeons; in pulmonary hemorrhage the inhalation of hot water in the form of steam is said to be a most valuable agent. Prof. Hamilton, of New York, has of late years strongly urged as a preventive measure against traumatic inflammation the use of warm water instead of cold, and of immersion as superior to irrigation. He places the injured part in a water-bath, constantly maintaining a temperature of 90° to 95° F., and keeps it there from one to three weeks. When from the position of the injury this is not practicable, he covers with several thicknesses of sheet lint, previously saturated with tepid water, and encloses this with oil silk. When the bath can thus be employed, little or no inflammatory reaction takes place, and gangrene is very successfully arrested, even in exceedingly severely lacerated and contused wounds of the extremities. Dr. H., from an extended experience, much prefers this to the cool or cold prophylaxis of inflammation. In painful hemorrhoids, where there is much tenderness and considerable hemorrhage, the use of hot water locally as well as by injections, is not only exceedingly grateful to the patient, but is also a prompt and efficient means of arresting severe hemorrhage.

The uses of hot water in obstetrical practice are as important as in medical or surgical practice. Our leading gynecologists are fully aware of its value, and make extensive use of it by vaginal injections to relieve congestions and inflammations of the pelvic organs. And while (as Dr. Emmet says) "it is not the cure-all for these affections," it is of such great value, that were its

worth generally known much of the cauterization, intra-uterine medication, scarification, and other operative measures, would be done away with, greatly to the relief of suffering women."

Hot water injections, or the hot douche, is one of our most effective measures to be used in chronic metritis.

Large quantities of water, and frequent applications, are needed to produce the best results.

Excellent results are often obtained by the alternate use of the hot and cold douche.

In severe cases of hemorrhage resulting from abortion, it is an admirable remedy in checking the hemorrhage, by producing rapid and permanent uterine contractions.

Not long since, I succeeded in controlling one of the worst cases of uterine hemorrhages I ever saw by the use of hot-water injections thrown into the uterine cavity.

In severe cases of post-partum hemorrhage the hot-water injections into the uterine cavity are of great service.

In obstinate cases of chronic inflammation of the os and neck of the uterus, the frequent applications of hot water into the vagina are of great service; in cases of leucorrhœa resulting from a want of tone in the mucous and muscular tissues of the vagina, hot-water injections are par excellence the remedy mostly to be relied upon. After severe labors, where there is much tenderness of the parts owing to the great strain, the daily injections of hot water are of great service, not only on account of their soothing effects, but also as a means of preventing inflammation of the uterus and its appendages.

I am satisfied that many cases of child-bed fever, following protracted labors, might be prevented entirely by the frequent use of hot vaginal injections.

Says Professor Lusk: "Putridity creeps up from the vagina, which should be thoroughly washed out. In normal labor the hand, and sometimes instruments, carried into the uterine cavity, may necessitate washing, which may be the direct means of saving life. Wash out the uterus thoroughly with carbolic acid solutions, or other disinfecting fluids."

Since the introduction of this plan by our Continental physicians, the per cent. of cases of child-bed fever has been very materially diminished.

Dr. R. H. Gunning, member of the Royal College of Physicians of London, recently read a paper before the Medico-Chirurgical Society of Edinburgh on the "Gynaecological Uses of Hot Water," from which I clip the following:



"Ladies suffering agonies in menstruation are better relieved and cured by very hot hemicupia than anything else. Of course, complications must be attended to at the same time; the bowels need attention, or a weak circulation or cold extremities may need a hot stimulant—hot punch; but such complications being attended to, a hot hip bath is the safest means, not only in relieving painful menstruation, but when defective or in excess—used for successive periods—the first is increased, the second is diminished. In acute leucorrhœa or irritated rectum, in the tenesmus of diarrhœa, besides the hip bath, hot water simply or medicated with opium can be injected into the passage. I even use a very warm hip bath after labor, when the lochia are excessive and the patient is feverish. In this way, ablution is effective, the parts are soothed, and a source of puerperal fever, especially in warm climates, is removed. I have the patient carefully lifted and set down in a very plentiful and hot hip bath. A recent illustration of the use of hot water occurred to me in Italy. A lady's absence from the table at the hotel was daily regretted by her husband and friends, and medicines were doing her little good. I found she had had an abortion about a month ago, and that the hectic and lassitude were due to the painful post-partum hemorrhage. I advised her to sit down at once, and again and again, in very hot water, and also to inject it plentifully. She was soon relieved, and on the second day was at the table and out everywhere, quite well."

Playfair invariably recommends intra-uterine injections in the puerperal bed. He says: "They should never be omitted in all cases in which self-infection is possible; and, indeed, even when there is no reason to suspect the presence of a local focus of infection, the use of antiseptic lotions is advisable as a matter of precaution, as they can do no harm, and are generally comfortable to the patients."

It is not necessary to use intra-uterine medications in all cases in the puerperal state. Where the system begins to show evidence of general poisoning, and there is reason to suspect a putrid material within the uterus, then this mode of treatment is in the highest degree imperative.

There are many other conditions in which the use of hot water is of great service in obstetrical practice, which I would like to refer to, but fear that I have already taxed your time and patience entirely too long.

In conclusion, I would say that whatever may be the mechanism through which the effect is ac-

complished, I have been taught, both by experience and observation, that hot water is a simple, cheap, and effective means for attaining good as well as permanent results, in both medical, surgical, and obstetrical practice.

#### MISCARRIAGES.

BY E. H. COOVER, M. D.,  
Of Harrisburg, Pa.

The frequency with which miscarriages occur, the alarming extent to which abortions are procured by females, married and single, upon themselves, to avoid the care of children upon one hand and shame on the other, the danger and suffering entailed upon them, and the increased number of embryonic lives wantonly destroyed, call for a careful study of the symptoms, diagnosis, and treatment, by the conscientious practitioner who looks upon the practice of his profession in a higher sense than as a mere source of pecuniary advantage.

It is a subject which I consider has been in a great measure neglected, although several very eminent professional gentlemen have given to the annals of medical science opinions, the result of experience, which have proved valuable acquisitions, and by their timely precepts saved many valuable lives. With a view to the furtherance of useful knowledge in this direction, and in the indulgence of a hope that an experience gathered in a large practice, covering a period of over thirty years, may enable me to throw some additional light upon a subject which must be of interest to every physician, I offer the following, and in doing so beg the indulgence of the reader for all deficiencies:

*Causes.*—The causes which lead to the destruction of embryonic life, and the premature arrest of utero-gestation, may be classed as predisposing and exciting. Among what may be termed predisposing causes may be enumerated general irritability of the system, deficiency in the nutritive function, the susceptibility of the uterus to sympathetic affections, *uræmia*, and some forms of *toxæmia*.

The exciting causes are the application of violence either directly to the uterus itself or to some distant organ which may in return by a sort of reflex action exert an influence upon it, jumping from a height, falling down stairs, sudden fright, blows upon the abdomen or back, the internal introduction of knitting or crochet needles, the use internally of highly stimulating decoctions and active purgatives, all form exciting causes, and are fruitful agents in bringing on abortions.

My own experience, however, has been that of all causes, except those intentionally procured, *reaching overhead* is the most frequent source, and a habit which every pregnant female should guard carefully against.

*Symptoms.*—The symptoms by which abortions are preceded are as varied in their peculiarities as the causes which lead to them. There are, however, a number of general symptoms which are unmistakable in their character, and point significantly to the commencement of an abortion. There is pain in the back and pelvis, coming on and going off with the character of labor pains. In many cases it will only be a backache with feeling of dragging and weight in the pelvis until the discharge of blood becomes free, sometimes sudden and copious, at other times slow and gradually increasing; then clots are passed, and the woman feels exhausted. Sometimes the pain is slight and the hemorrhage copious, and at other times both are slight, yet continuous, until the ovum is destroyed without expelling it.

An examination now shows the os dilated more or less; the internal os, as a rule, is further dilated than the external os. The cervix seems conical and directly continuous with the line of the body of the uterus; where the process has lasted considerable time, a cadaverous odor in the discharge, or on the hand after an examination, is noticeable, which, in itself, is sufficient evidence of the presence of a devitalized ovum.

In many cases where the female does not know herself to be pregnant, and having been accustomed to copious menstrual discharges, a hemorrhage, occurring after having passed one or more periods, may be mistaken for an excessive menstrual discharge. This is particularly the case when the patient believes, as many do, that having missed a period, the next one following should furnish a more abundant discharge. It is, therefore, very important to note whether the discharge is a regular oozing flow; or whether at the time it spurts out as if forcibly propelled along the inner surface of the thighs or along the hand and forearm of the physician during an examination. If the latter is the case, it may be taken as an unfailing symptom of abortion, as no menstrual flow is ever expelled, the discharge having that hot feeling and with sufficient force to produce the like.

*Diagnosis.*—In order to arrive at the correct diagnosis, it is necessary to take into consideration all the conditions; for upon these the treatment is based, and upon the treatment success depends. The physician will be greatly aided by

having all the discharges carefully preserved, and subjecting them to a critical examination. The practical eye will soon detect any portion of the ovum which may have been detached, and be better enabled to make his diagnosis and prognosis.

It is always well to suspect miscarriages when there is pain and flooding; and if the patient has had previous miscarriages, that fact alone is significant in making up the diagnosis.

*Prognosis.*—When the habit has been established, it is safe to conclude that it will occur again, and it is very difficult to prevent it.

After pain and hemorrhage have set in, abortion has already commenced; and where the discharge has been abundant and the pain severe, to attempt to arrest the process by the use of astringents or styptics would be but to prolong the suffering of the patient. But even in such cases it has stopped and the pregnancy gone on to full term. If an examination show a dilation of the os and protrusion of part of the ovum, or even a clot, we will be satisfied that it will go on. If pain is present without hemorrhage, the process may be arrested by proper treatment. If there is hemorrhage without pain, the aspect is not wholly adverse, but I regard hemorrhage as an adverse symptom, as it shows a more or less separation of the ovum from the walls of the uterus, thereby endangering its vitality. So long as the os is not open, and the sphincter muscles preserve their rigidity, there is yet an opportunity to prevent a miscarriage by appropriate treatment; but when once open, the use of astringents, either administered internally or applied locally, is vain, and abortion must follow.

*Treatment.*—It frequently occurs that the physician is not called until the symptoms have become alarming to the patient or those about her, and when he arrives he finds her in a state of great alarm. She fears she is about to bleed to death, and her whole nervous system is wrought up to a high degree of tension. To calm her fears and reduce this difficulty, I am in the habit, if there is much pain, of administering a dose of morphine. If the pain is not severe and the nervous sensibility great, I give bromide of potassium; and if both are present and equally severe, I combine the two in quantity and proportion as meets my judgment at the time. I find this course very useful as a preparation for further operations. If the os uteri is closed and a careful study of the condition affords the belief that a miscarriage can be prevented, I administer narcotics; if the stomach is sick, *nux vomica*, and bathe the lumbar region of

the spine and abdomen with a mixture composed of one part of chloroform and two parts ether sulphuric. The rapid evaporation of this compound from the surface of the skin makes it refrigerant in its action, and produces a sedative effect upon the parts to which it is applied. This also being grateful to the patient, aids materially in calming her nervousness and securing a condition of rest often valuable in arresting acute symptoms. When the hemorrhage is so excessive or long-continued as to cause alarm or produce a condition of syncope from exhaustion, active measures are required. If the os is sufficiently dilated to admit of the passage of the index finger as far as the second phalanx, or through the external into or through the internal os, I introduce it, preferring the right hand, and by a sweeping circular motion I either break away that portion of the placenta adhering thereto, as far as it can be reached; or if it is not possible to pass the finger any farther than into the external os, I perform the same operation, thereby irritating the uterine nerves.

The conditions under which this operation would apply are not infrequent, yet they only constitute a minority. In the majority of cases the os is sufficiently expanded to separate the placenta, which can be easily removed by inserting the finger and hooking it out. In cases, however, where the os is not sufficiently dilated, the operation above referred to is far more sure and speedy in arresting hemorrhage than the use of tampons or the dilation of the os by means of sponge-tents. I have never failed in a single instance to arrest hemorrhage at once by this method, when the conditions were as above stated. The reason is plain; as soon as the uterine nerves are irritated, or that portion of the placenta adherent to the internal os is separated, the blood-vessels contract, and by the rapid formation of coagulum, a natural mechanical barrier is opposed to the further effusion of blood. If the patient is in a state of syncope the result is more speedy, as the condition is always more favorable to the coagulation of the blood and the formation of the clot. The hemorrhage arrested, I assure the patient that her bleeding is over and leave her to rest in quiet, awaiting the natural expulsion of the ovum, which may occur in a few hours, or perhaps not for days, weeks, or even months; yet it will come sooner or later, and with less suffering and danger to the patient than if removed at once by force. The placental attachments are often sufficient to maintain their vitality for some time.

I may here state, that in my practice I have never found the use of instruments necessary. I have been upon several occasions recalled, but in every case found the return of hemorrhage due to the result of failure to fully enter the external or internal os. All such cases were met by the administration of the fluid extract of ergot, or tamponed. With the detachment of the placenta there is usually an arrest of hemorrhage; even though the ovum has not been passed, the danger may be regarded as very much lessened. But the question will be asked, "What are we to do if the after-birth does not pass?" If the os is dilated and you can remove by hooking the finger over it, and with pressure over the uterine globe through the abdominal walls and the bearing efforts of the woman, it may be carefully removed. If it cannot be removed in that easy manner of procedure, wait until it passes away naturally, even though it decompose and pass off as an offensive discharge; there may be more safety than with ordinary rough usage.

This, however, is seldom the case in pregnancy of two months or less, of which I am specially treating in this paper.

*After-treatment.*—The first indication in the after-treatment is rest. I recommend the patient to remain in bed at least nine days in order to avoid accidents, which are liable to occur during that period. This period of time is specifically regardless of the discharge of the after-birth. If it has passed out before the expiration of the nine days, it is well; if not, it does not matter. I consider the patient at that time out of all danger from causes resulting from her premature delivery. If patients would more generally obey this direction, there would be fewer cases of diseases peculiar to women who have passed the period of maternity.

*Diet.*—As regards diet, I am generally disposed to be somewhat liberal. A tender piece of beef-steak or lamb chop, or soft-boiled egg, may be allowed, and will, in the majority of cases, be more advantageous than injurious. Strict regimen in diet, I believe, has a tendency to retard recovery, by withholding necessary nutriment.

*Cleanliness.*—In order that every possible comfort may be used as an auxiliary for the promotion of recovery, I direct that the garments and bed-linen be frequently changed, and the skin be cleansed by occasional ablution by means of the sponge-bath. By removing the secretions frequently a healthy action is engendered, and the skin made to perform its functions naturally. The bed-clothes should be light, and the temperature

of the room regulated in accordance with the comfort of the patient. Attention to the condition of the bowels is important. When a disposition to constipation is manifested, I generally administer a mild purgative. Plenty of light, fresh air, and cheerful surroundings, are valuable adjuncts in promoting rapid convalescence.

## HOSPITAL REPORTS.

A CLINICAL LECTURE DELIVERED AT THE  
PHILADELPHIA HOSPITAL.

BY JAMES TYSON, M. D.,

Physician to the Hospital and Professor of General  
Pathology and Morbid Anatomy in the  
University of Pennsylvania.

Reported by WILLIAM H. MORRISON, M. D.

### Emphysema.

GENTLEMEN: I wish to-day to call your attention to a very important series of cases which illustrates a pulmonary condition not always easily remediable, but at the same time so imperfectly understood in that which essentially constitutes it, that I am quite sure a more thorough understanding of the condition will lead to more successful results in treatment. I allude to that condition known as pulmonary emphysema, or emphysema of the lungs.

There are two applications of the term emphysema, and they have very different significations. In the first place, it is applied to what might be called an infiltration of the soft tissues, including the interstitial tissue of the lung, with air or gas. Most frequently the source of this air is a wound of the lung, as a result of which, at each inspiration, air enters the connective tissue and infiltrates it, producing on pressure a peculiar crackling sensation, readily recognized. In such cases, the emphysematous condition is found more particularly in the chest walls, but any other connective tissue of the body may become pervaded with the air, and give the peculiar crepitation to the fingers. Again, the emphysematous condition may be due to the infiltration of the tissues with gas, the result of decomposition. It is sometimes found in the neighborhood of wounds which take on an unhealthy action, and where decomposition leads to the generation of gas. This form of emphysema is, of course, more circumscribed than that due to a wound of the lung.

The form of emphysema to which I desire to call your attention is a very different condition from those which I have described. It consists primarily in a simple dilatation of the air-vesicles of the lung. The subsequent fusion of adjacent dilated air-vesicles, leads to the development of what suggest little blisters or bullæ, varying in size, over a greater or less area of the lung. They are found more particularly at the edges and apex of the lung. More commonly, this emphysema is what is known as lobular; that is, the air-vesicles going to make up a lobule have become dilated, the partitions, separating one from another, have been broken down, and a

bladder is produced the size of the lobule. The condition may, however, involve a lobe, or an entire lung. This, in a few words, is a description of the affection which I propose to illustrate by these cases, which jointly, I think, will afford all the symptoms which are met with in this condition.

The history of the first patient is as follows:

"John M., aged fifty-eight years, laborer, was admitted to the hospital in September, 1883. He began to ail a year earlier, the symptoms being pain in the infra-axillary region of the right side, shortness of breath, and slight cough. During the following winter, he was obliged to stop work on account of an aggravation of his symptoms. He received no treatment, but began to improve towards spring, and was then able to walk, but not to work. Since admission into the hospital, he has complained of great weakness and shortness of breath on exertion. There has been some cough and a viscid, yellowish-white expectoration."

I wish you to note that the cough is slight, while the shortness of breath is great.

In the physical examination of the case, I shall first call attention to the facts learned by inspection. Observe, that although he is emaciated, how prominent the upper front part of the chest is, how marked both as to depth and width are the intercostal spaces, how with each act of inspiration the lower part of the chest below the nipples is drawn in, and how the intercostal spaces are seen with increased distinctness. Observe the depth of the supra-clavicular fossæ and how their depth increases as he breathes; how the scaleni and other muscles which move the upper portion of the chest walls, do a large part of the work in drawing up or attempting to draw up the clavicles. Observe that although breathing with considerable effort, how little the upper part of his chest moves as compared with that of a man in health. On the other hand, the upper abdominal region, in which the diaphragm plays, is characterized by considerable movement. Posteriorly, observe the great prominence of this portion of the chest, which in a general way may be compared to the shape of a barrel. This is, however, not so marked in this case as in another which I shall show you.

Let us continue our physical examination by percussion and auscultation. Observe the marked resonance obtained by percussing over the anterior portion of the chest. Of course, as his is a thin-walled chest, we should expect it to be more resonant than if covered by a thick layer of fat; but even independent of this, it may be said that the chest is more resonant than is normal. This hyper-resonance may be said to pervade the whole of the chest, back and front, although in some places it is more marked than in others, as for instance in the region below the left scapula, as compared with that below the right.

Before auscultating, let us reason to the signs which we should naturally expect to find in such a case. Remember, if you please, that these air vesicles are dilated, and that they are not only dilated, but that the walls separating the individual vesicles are broken down, so that a number of vesicles are thrown into one cavity. Under such circumstances, the elasticity of the walls



must be lost. A large degree of the efficiency of the act of expiration is dependent on the elasticity of the air vesicles, and in the absence of this elasticity, it is evident that the air can be but partially expelled. There is no obstacle to the entrance of air into the vesicles, nor any to its outward movement, but the *vis a tergo* is wanting.

We should, reasoning from these facts, in a typical case of emphysema, expect to have a short inspiratory sound and a prolonged expiratory sound. This is exactly the reverse of what is found in health. There the inspiratory sound produced by the bronchial and vesicular elements is long, and the expiratory sound is short. In point of fact, we do not have in emphysema these sounds exactly as I have described them, because emphysema is rarely an uncomplicated affection. It is often associated with bronchitis, and it is constantly accompanied by spasmodic contraction of the bronchial tubes or asthma. The typical sounds of emphysema are therefore usually complicated with the sounds attributable to these affections. Let us listen in this particular case, and observe the signs that are present.

On the right side below the clavicle there is a sub-crepitant, that is a small bubbling rale. It is a bubbling sound larger than a crepitant, and smaller than a mucous rale. When I again place my ear over the spot, the sound has disappeared, showing that it was due to little mucus, which has become displaced, and the rale is replaced by an inspiratory murmur, which is not much altered. The expiratory murmur is distinctly prolonged. As I carry my ear downwards over the right chest, I note the continuance of the rough, short inspiration, and the prolonged feeble expiration. In the right axillary and infra-axillary regions, the sounds are tolerably normal. Below the left clavicle there is rough inspiration and prolonged expiration. As I pass downwards, the prolonged expiratory element continues, while the inspiratory element is more natural. In the left axilla, I note the feeble prolonged expiration as the most marked feature. Posteriorly, in the supra-spinous fossa of the right side, I cannot say that the sounds are materially altered. Below the spine of the scapula, the prolonged expiration makes its appearance. Below the right scapula the sounds do not differ much from those of health. On the left side expiration and inspiration are natural above the spine of the scapula. Over the scapula I begin to hear rough inspiration and prolonged expiration. Below the angle of the left scapula the sounds are not materially altered.

Let us now turn to the second case, of which we have the following history: "Jacob S., age 34, a widower, a watch-maker by occupation, entered the hospital September 1, 1884. His family history is good. He has been a moderate drinker. Fourteen years ago he had a chance with the usual secondary symptoms two years later. He has had pneumonia twice on the left side, the first time five years ago and the second time two years ago. He has been admitted to the hospital seven or eight times for the present trouble. This dates back to a cold which he caught five years ago. At that time he suffered with pain in the chest and shortness of breath. These symp-

toms have continued with a gradual increase in severity up to the present time. With this there have been frequently recurring attacks of asthma. There is more or less constant cough, which is often paroxysmal. It is accompanied with considerable expectoration, and is worse at night. The appetite is good, and the bowels are regular. For about a year a ventral hernia caused by the coughing has been present."

The difference in the history to which I wish particularly to call attention is this, that this man has had a great deal of cough, while the other man had but little cough.

Another fact in his history is interesting as bearing on the etiology of the affection. The man is by occupation a watchmaker, and for the past eighteen or twenty years he has been compelled to use the blow-pipe for fifteen or twenty minutes at a time two or three times a week. I shall refer to this again in discussing the etiology of the affection.

This case has lasted longer than the preceding one. The appearance of his chest also differs materially from that of the first man. It is well covered with fat. Notwithstanding this, if the breathing is carefully watched, sulci are observed above the clavicles, and although he is making considerable effort in breathing, the upper part of the chest moves but slightly. The mammary region is conspicuously prominent, and below the mamme, on each side, the ribs are retracted in breathing, not markedly, but sufficiently to disclose distinctly the intercostal spaces. In the epigastrium is observed the prominence due to the ventral hernia. The strains to which the fibres of the recti muscles have been placed in the act of coughing has caused them to separate, and the abdominal viscera project each time he coughs. The "barrel" shape of the thorax is here more easily recognized than in the previous case. Note the greater prominence of the right side posteriorly as compared with the left. There is a protrusion of the region below the right scapula. It might at first sight be thought that this is due to unequal development of muscle, but a little examination shows that the ribs are immediately under it, and there is therefore no doubt that there is protrusion of the ribs at this point. We should expect theoretically to have increased percussion resonance over this bulging portion, and such proves to be the case, showing that the right lobe of the lung is more emphysematous than the left lobe. Percussion gives a general hyper-resonance which is however most marked below the right scapula. But the typical auscultation signs of emphysema just described are overshadowed by the sonorous and sibilant rales which, caused by the asthma, complicate the emphysema.

I present you a third patient, whose history is as follows:

"Jacob R., aged fifty-nine, unmarried, a farmer by occupation, and later a hostler, was admitted to the hospital ten years ago. The present affection dates back twenty years, at which time he caught cold from going in and out of an ice-house. He has had a troublesome cough, with considerable expectoration, and shortness of breath ever since. He was, however, able to work up to two years ago. Of late years, he has also had frequent attacks of asthma."



Inspection again reveals depressions above the clavicles, and there is a prominence of the entire præcordia. All that region occupied by the sternum in front, and the cartilages, as far as their junction with the bony ribs, is unusually distinct. Observe, also, the slight degree of movement of the chest, although the breathing is labored. We note, also, the exaggerated movement of the upper abdominal wall and the increase in width of the intercostal spaces during the act of inspiration, although this is by no means as marked as in the first case. Posteriorly can be distinctly seen the "barrel" shape, much more marked than in either of the other two.

I also call attention to the displacement of the heart. The situation of the apex beat, instead of being an inch below and within the nipple, is fully two inches below it, and the area of cardiac dullness is much diminished. This is a striking symptom of emphysema, and in this particular case, is very conspicuous.

Both the displacement of the heart and the diminished area of cardiac dullness are both due to the enlargement of the lungs, the heart being pushed downward by the enlargement in the vertical direction, and covered by the extension of the edges of the lungs anteriorly. For the same reason the liver is also pushed downward.

In addition to the facts already mentioned in connection with these cases there is a most marked change in the antero-posterior diameters of the chest, which can be best appreciated by a lateral examination. In case 2 the antero-posterior diameter is fully as great as the transverse.

As to the *diagnosis* of emphysema, the conditions with which it is most likely to be confounded are pleurisy and pneumothorax, but there should be no difficulty in the diagnosis. As you well know, there is in pleurisy also a bulging of the chest, but in the bulging of pleurisy, although there may be tympanitic resonance above the level of the effusion, yet over the most prominent portion of the chest, there is dullness or flatness on percussion, and the intercostal spaces are prominent rather than depressed. There is in pleurisy the same shortness of breathing and the same effort at breathing. The physical signs are however so different that there should be no trouble in the diagnosis.

In pneumothorax there is a closer simulation of the physical signs of emphysema. There is also bulging of the chest, which is, however, usually more marked on one side than on the other, but as it is rather rare to have a uniform, symmetrical emphysema, we may have here also a greater prominence of one side than of the other. It is said that the parts of the lung most likely to be affected with emphysema are the upper part of the right lung and the lower part of the left. So in the matter of percussion, both emphysema and pneumothorax give hyper-resonance. Pneumothorax, however, gives more marked tympany than emphysema. It has always seemed to me that the books rather exaggerate the clearness of resonance found in emphysema. The hyper-resonance, although marked, is not always so striking as we are lead to believe. In the hyper-resonance of pneumothorax there is a real tympany, comparable to that obtained over the distended abdomen. In pneumothorax there is very

frequently metallic tinkling, caused by the dropping of fluid from the perforation in the lung into the pleural sac. In the lower portion of a chest with pneumothorax there is always effusion, which gives dullness on percussion, and a line of separation between the tympany and flatness is demonstrable. Pneumothorax is sudden in its occurrence, whereas emphysema develops gradually. It is, however, not impossible for the two affections to be combined.

There is still another condition with which emphysema might be confounded, but this is so rare that unless one's attention were drawn to it from his personal experience, he would not be likely to think of it. The condition to which I refer is diaphragmatic hernia. This is an uncommon condition, but when it does occur it gives rise to tympanitic resonance in the chest. To my mind the possibility of this condition is always present, because of personal experience.

I had under my observation for a long time a very singular case, in which there had been a rather sudden development of symptoms. The condition came on suddenly while engaged in a scrimmage or wrestle. He was seized with a sudden sharp pain in his left side, and a day or two later he began to have a peculiar puffing respiration. With this there was extraordinary clearness on percussion over the region of the left lung. He was examined repeatedly by myself and others, but no one thought of the true cause. None suspected diaphragmatic hernia. The autopsy showed that almost one-half of the abdominal viscera were in the left pleural cavity, and that the lung was pushed into the upper portion of the chest, occupying a space about the size of the fist. This man presented the bulging, the shortness of breath, and the hyper-resonance peculiar to emphysema. Having once met such a case, one is apt to be on the look-out for it again. I therefore mention in passing that diaphragmatic hernia may produce physical signs simulating those of emphysema.

We next come to the *etiology* of emphysema. By far the larger number of cases of emphysema are the result of chronic bronchitis. This bronchitis, which may have for its consequence emphysema of the lungs, may begin in childhood; it may begin as whooping-cough, from which the child has not completely recovered, or succeeding which it has been subject to constantly recurring attacks of bronchitis. It may occur later in life, as the result of exposure to cold and recurring attacks of bronchitis. It is scarcely likely if the lung preserved the proper integrity of its tissue, that even under the forced strain of coughing it would undergo the dilatation and destruction which occurs in emphysema. Sooner or later, with chronic bronchitis, there is a change in the integrity of the tissues of the air-vesicles, which makes them more yielding and more likely to give way under strain. It has been stated the blowing on wind instruments is a cause of emphysema, but this is by no means a settled fact. It is not impossible in a case where there was chronic persistent bronchitis, with the alterations of structure which occur in this disease, that blowing on wind instruments might produce emphysema. That this is of itself sufficient is hardly likely. It will be remembered that one of

our patients is a jeweller, and has worked a good deal with the blow-pipe, using it several times a week, and keeping it up for a length of time. The effect of this would be similar to that of blowing on wind instruments. The prolonged, full inspiration, and the long, forced expiration, would naturally tend to produce dilatation of the vesicles. That it is of itself sufficient to produce this dilatation has not been established, but as I have said, it is not impossible that in connection with chronic bronchitis, and the changes in texture which occur in this affection, it may assist in the production of emphysema.

Again, it is hardly likely if all parts of the lung are equally free to the entrance of air, that the forcible inspiration and expiration which constitute coughing would produce the over-dilatation of the vesicular structure. We are in the habit of saying that emphysema results from inspiratory and expiratory strain. I am inclined to believe that strain of the lung occurs more commonly in the act of expiration than in inspiration. As a result of the chronic bronchitis, certain tubules become plugged with mucus, which acts as a valve, permitting the entrance of air, but not allowing of its exit. Finally the vesicles become filled with air, which cannot be passed out. In the act of expiration, the lung is compressed, and the air is forced back into all the little corners; the air cannot get out, while at the same time the lung is being squeezed; it is forced in the direction of least resistance towards the air vesicles, and dilatation takes place in the apices and edges of the lungs. This is probably the way in which expiratory strain acts in producing dilatation.

Over-distension may also result from forced inspiration. As the result of the chronic inflammation of the bronchial mucous membrane, certain parts become plugged with mucus, but the valvular action is in the opposite direction, permitting the air to get out, but preventing it from getting into the vesicles. A certain amount of air enters the lung with each inspiration, but if a portion of the lung is cut off, the air must go elsewhere, and the remainder becomes the seat of what may be termed collateral aeration. This produces an undue distension of the air vesicles, and they yield to the dilating force. It is evident, however, that the dilating force thus exerted cannot equal that in expiratory strain, and I say again, therefore, that expiratory strain acts more potently than inspiratory strain in producing emphysema.

As a result of the over-distension of the air-vesicles, there is first dilatation, then the walls of the vesicle atrophy, and with the atrophy of the walls the blood vessels surrounding them are destroyed. Although under these circumstances the lung occupies more space, its blood aerating power is diminished. The circulation is cut down to the larger trunks, and the blood, as it were, takes a short cut from the pulmonary arteries to the pulmonary veins. The aeration of the blood is thus rendered difficult or impossible, accounting thus in part for the dyspnoea.

This symptom of shortness of breath is also partly due to the fact that the air the vesicles does not change. One of the most important results of emphysema is the loss of elasticity in the walls of the air vesicles. The intercostal muscles, the diaphragm and auxiliary muscles of respiration,

enlarge the thoracic box, and the lungs expand to fill it by their own resiliency, producing the act of inspiration, while the air is expelled in expiration partly by the recoil of the elastic tissue and partly by the pressure of the contracting thorax. This natural resiliency is absent in cases of emphysema. The lung is always filled with air, but it is air charged with carbonic acid, and does not change. As a consequence, the patient makes increased efforts to draw the air into the lungs, but as the air vesicles are already filled with air these efforts are ineffectual.

As to treatment, it is impossible, so far as we know, to restore destroyed lung texture. If a number of air-vesicles have been converted into one sac or bladder-like cavity, I believe that there are no means by which these vesicles can be restored. At the same time, where we have youth on our side, there is some, if the structural loss is not too great; its functions may be supplemented through the natural recuperative tenderness of the economy. Our efforts must be directed mainly to averting those conditions which complicate and increase the emphysema. As I have said, chronic bronchitis is its most frequent cause, and, therefore, we must try to relieve this condition by every means in our power. At the same time, the general health is apt to be impaired, and it is as important that this should be restored as that the bronchitis should be relieved. The blood is to be restored to a proper composition by tonic remedies like cod-liver oil and iron, and the use of the very best food that the patient can procure. To the cod-liver oil and iron I always add strychnia in full doses,  $\frac{3}{16}$  to  $\frac{1}{4}$  of a grain, while arsenic, believed by some to have a special action on the tissue, is certainly an admirable tonic in the shape of Fowler's solution, five drops at a dose for an adult, or of arsenious acid,  $\frac{1}{30}$  of a grain.

The bronchitis is treated by the usual remedies; but at the same time it is of such importance that the stomach should be kept in good condition, and that digestion should not be interfered with, that more than ordinary care is required in the selection of remedies for the bronchitis. A very useful measure in these cases is counter-irritation, which in no way interferes with digestion. Mustard plasters afford in such cases a convenient method of counter-irritation. A mustard plaster can be so prepared that it may be worn continuously without discomfort. The plaster is to be prepared by mixing the mustard and flour, say 1 to 5, with one of equal parts of white of egg and glycerine, instead of with water.

I have mentioned strychnia as a tonic, but it may also be regarded as an expectorant, and I have known secretions in the lungs to be rapidly disposed of by its use. It has also the effect of improving the nutrition of the muscular tissue of the walls of the bronchi, as it has of improving the muscular tissue in its entirety. Full doses should be given. I usually give it in doses of from the thirty-second to the twentieth of a grain, repeated three times a day. This is to be kept up for a long time.

The ammonium carbonate and the ammonium chloride are also useful expectorants where there are abundant secretions. The former is more prompt in its action, and when given alone in-

stead or in combination with syrups, especially senega, is no more apt to derange the stomach than the muriate. It may be given in from 5 to 10 grain doses every three hours, or oftener, if necessary.

The other expectorants, syrup of squill, syrup of senega, and syrup of ipecac, I am slow to use, unless there is some urgent reason for securing a prompt effect. Anything that is relaxing or tends to derange the stomach should not be used. If there is asthma, the relaxing effect of these remedies may be required.

The palliative treatment constitutes an important part of the treatment of these cases. This will, of course, depend to a large extent on the nature of the complication. I have already stated that asthma, *i. e.*, a spasmodic contraction of the bronchial tubules, is one of the most serious and frequent complications of emphysema. While there are certain physical signs significant of emphysema, which consist in feeble inspiratory murmur and prolonged feeble expiratory sound, these are in the majority of cases overshadowed by those of the complication which is present, bronchitis or asthma. You will recollect that in auscultating the chest of one of the patients, we found numerous sonorous and sibillant rales. They can be produced only when there is an abnormal relation between the air entering the lungs and the calibre of the tubules through which it passes. This may be caused in two ways—one by a thickening of the mucous membrane of the tube from inflammation, the other by a narrowing of its calibre from spasmodic contraction. In the present case it is hardly correct to speak of this complication as asthma. This man, however, has attacks in which he is much worse than at present, and has greater difficulty in breathing. These temporary attacks of asthma of course require treatment. I know of no more efficient way of breaking up an attack of asthma, than the hypodermic injection of  $\frac{1}{4}$  of a grain of morphia with the  $\frac{1}{16}$  of a grain of atropia. This will usually relieve the paroxysm almost immediately. If relief is not complete, the injection may be repeated every six hours. It is under these circumstances that the various inhalations are employed. The smoke of burning stramonium or tobacco, ether, chloroform, and a large number of other remedies which have the effect of relaxing the spasm, have been used in this way. Of course, in connection with the attacks of asthma, the other remedies of service in relaxing the bronchial tubes, such as belladonna and iodide of potassium, are given. Tincture of belladonna, in doses of ten or fifteen drops, combined with ten grains of iodide of potassium, will often break up so much of this condition as is due to spasmodic contraction of the tubules.

To relieve the constant dyspnoea, a treatment was suggested some years ago by Waldenburg, the usefulness of which is much limited by its unavailability. This is the introduction into the lungs of compressed air and the breathing out into rarified air. It is plain that if compressed air can be introduced into the vesicles that the aeration of the blood will be more perfect, and that if the patient breathe into rarified air, the residual air which it is so difficult to get rid of will be sucked out. This requires a special appa-

ratus, known as Waldenburg's apparatus. We have become acquainted with the effect of breathing compressed air from the experience of persons in diving-bells. It slows the pulse and increases the force of the heart's beat, and it slows the respirations while it increases their efficiency. Under these circumstances the blood is more thoroughly aerated, and the embarrassment of respiration is diminished. Breathing into rarified air more completely empties the lungs, the blood rushes in more thoroughly, and is better aerated. Sometimes these patients are benefited by going to high altitudes, while at other times the condition is aggravated. The symptoms in all cases are aggravated at first, but in those which are benefited the increased dyspnoea is gradually diminished. Where relief ensues, it may be ascribed to a more complete emptying of the air vesicles.

If such measures can be employed and the patient kept from having fresh attacks of the affections which have caused the emphysema, he can be kept in comparative comfort; but if he is necessarily exposed to bad weather and subjected to frequent attacks of bronchitis, there is not much relief to be afforded. It is for this reason that these patients always get better when they come into a hospital, where they are housed, receive good food, and are protected from exposure. They improve and leave the institution, but returning to their old habits, again catch cold and come back to the hospital. One of these patients has been discharged and readmitted some seven or eight times.

## MEDICAL SOCIETIES.

### CHICAGO GYNECOLOGICAL SOCIETY.

Regular meeting, December 19, 1884. The President, Dr. H. P. Merriman, in the chair. Dr. W. H. Byford read a paper entitled

#### A Case of Mural Pregnancy.

The history of the case was obscure. The patient, twenty-eight years old, married seven years, had one child, six years old. She supposed she became pregnant, for the second time, in February, 1883. In April, she became fatigued and had hemorrhages, which continued until May 9—about four weeks.

October 14, a discharge of yellow fluid, about one gallon in quantity, occurred. A putrescent, sero-sanguineous discharge followed, continuing three months.

January, 1884, a large brownish mass, with very fetid odor, was expelled. After this event menstruation occurred until July.

In May, she was quite large, and had bearing-down pains. She entered the hospital October 6, 1884. She was tapped October 18, and about four quarts of thick, tenacious fluid, resembling the fluid of an ovarian cyst, were removed. This fluid coagulated on the addition of nitric acid and on boiling. Assisted by Dr. R. Tilley, a microscopic examination was made, with negative results. The "Drysedale" cell was not found. Laparotomy was performed, and a fetus with pla-

centa was removed without hemorrhage or difficulty. In order to secure perfect drainage, it was considered best to remove the uterus. The operation was performed on October 30. The patient did not react, but died within twenty-four hours. Prior to the operation, the patient was extremely reduced by her protracted sufferings. Dr. Byford, in a similar case, at the present time, would elect the vaginal operation. The specimens removed from the woman were exhibited as supporting the diagnosis of mural pregnancy.

This was the second case of mural pregnancy that had come under the reader's observation within a period of five years. The first case was reported to the Chicago Gynecological Society some time ago. The patient was in labor and moribund when Dr. Byford saw her. She had been in labor until exhausted. There was no difficulty in making a diagnosis. The head was low down in the pelvis, almost on the perineum. The *os uteri* was well high inaccessible behind and above the symphysis. The body of the uterus, somewhat enlarged, could be felt in the lower and anterior part of the abdomen, attached to the tumor containing the fetus. The fetus could be felt through the abdominal walls, surrounded by a thick involucre, apparently as thick as the uterine walls. Fetal extremities could be distinguished. When dissected, the sac, in which the fetus was contained, was found to consist of a thick layer of muscular fibres. These fibres were directly continuous with those of the uterus. The tubes and ovaries lay on either side of the lower portion of the sac. The fecundated ovum had made its way down the tube, become lodged in a diverticulum in the uterine wall, and was gradually extended into the cavity of the abdomen. The fetus was thus developed within the uterus, though not within the uterine cavity. The resemblance to normal pregnancy is great in the presentation and position of the fetus, deep down in the pelvic cavity, behind the vagina. The head, in this case, was fixed by the concentric contraction of the uterine fibres, by which it was surrounded, and could be easily outlined as it lay there covered by the posterior vaginal wall.

The specimen presented is much less perfect than the one described, because of the numerous effects wrought upon it during the great length of time it remained in the maternal body, and the mutilation consequent upon enucleation.

The treatment of these cases ought to be considered apart from that of extra-uterine pregnancy at term. It is always a matter for special consideration in connection with each case as it presents itself, whether or no the removal of the fetus at term in extra-uterine gestation should be attempted. The dangers of laparotomy are greatly increased by the inability to remove the placenta. The surface to which it is attached has no contractile power, so that the divided vessels are left patulous. If hemorrhage does not immediately prove fatal, the blood is a source of sepsis that must almost certainly destroy the patient. Laparotomy would more likely prove successful if performed some days after the death of the child. In these cases of ectopic or interstitial uterine pregnancy, the fetus may be easily removed through the vagina. An incision made through the posterior vaginal wall would com-

pletely uncover the presenting part and enable one to apply the forceps, or attack it with the perforator and crotchet, as in ordinary labor. After the removal of the fetus the placenta should be allowed to separate spontaneously.

Since writing this report, Dr. Byford has seen a case, reported in the *Annales de Gynecologie*, July, 1884, occurring in the practice of Dr. Matheson, of England, illustrative of the execution of this plan. The case was reported to the London Obstetrical Society, under the title, "Extra-uterine Pregnancy, the Extraction of a Living Fetus through the Vagina." The child was slightly asphyxiated, but survived. A sponge, saturated with perchloride of iron, was introduced into the sac after removal of the placenta. The mother recovered. It would seem that the author did not expect his case to be one of interstitial pregnancy. During the discussion that followed only one of those present expressed the opinion that it was of that variety. Mr. Griffith thought it was either interstitial pregnancy or one in which the fetus was developed in one portion of a double uterus.

#### DISCUSSION.

Dr. Edward Warren Sawyer thought that interstitial pregnancy meant the development of the ovum in the uterine portion of one of the tubes. In Dr. Byford's case the uterine portion of the tubes was not involved. It reminded him of a case he had seen near Denver. In this case, a secondary uterus, with muscular walls, had been developed, but as the tubes were not involved, he did not feel justified in designating the case one of interstitial pregnancy.

Dr. D. T. Nelson said with reference to the treatment of the placenta, that Dr. Byford's advice was that usually recommended in the text books. The placenta should be left alone in those cases in which the walls of the secondary uterus were not muscular. He had seen a case in the museum of the Chicago Medical College in which no muscular fibre could be detected in the walls. When the walls of the adventitious uterus were muscular it was questionable whether or no the placenta should be left alone. If the placenta is removed, there is danger of hemorrhage; if the placenta remains, there is danger of sepsis. While there was reason to suppose that contractions of the adventitious uterus would check hemorrhage, he thought the placenta should be removed. He had had no experience in these cases.

Dr. E. C. Dudley replied to Dr. Nelson. Women, in cases of extra-uterine pregnancy, in which the placenta has been allowed to remain, do not die of sepsis. He had seen two or three cases in which the sac had been united to the abdominal incision. Whenever evidence of sepsis occurred, the sac was washed out, and the temperature immediately fell to the normal. The placenta under these circumstances is spontaneously eliminated in about three weeks.

It requires phenomenal powers of diagnosis to tell in the concrete case whether or no the sac had sufficient muscular fibres to prevent hemorrhage. The placenta should be permitted to remain within the sac.

Dr. J. H. Etheridge thought that if, on microscopical examination, it was found that the mus-



cular fibres of the normal uterus were continuous with those of the adventitious uterus, the case was one of mural pregnancy. In cases of abdominal pregnancy, there was a line of demarcation between the normal and adventitious uterus.

Dr. A. Reeves Jackson thought the members of the society were greatly indebted to Professor Byford for the presentation of such an interesting specimen. He thought, however, with Dr. Sawyer, that the results of the anatomical investigation did not support the author's diagnosis. The uterine portions of the tubes were not involved. So valuable a specimen deserved very close microscopical and macroscopical examination. It ought to be referred to a competent pathological anatomist.

Dr. John Bartlett thought the ovum had not passed through the tube, but had been developed in the broad ligament beneath the peritoneum, and had, in this manner, derived muscular fibres from the uterus.

Dr. W. W. Jaggard referred to the fact that next to ovarian pregnancy, interstitial pregnancy was of most infrequent occurrence. Up to the present time about thirty cases in regard to which the diagnosis was positive have been reported. Interstitial or mural pregnancy included other sites of development than the uterine portions of the tubes. Dr. Gilbert's case, reported in the *Boston Medical and Surgical Journal*, March 3, 1877, and alluded to by Professor Lusk in his treatise on midwifery, was a case in point. The ovum in this case was developed in what seemed to be a bifurcation of the fallopian tube. In Dr. Byford's case, the tubo-uterine orifices were not involved. The sac was extrinsic to the uterine walls. It was probably a case of abdominal pregnancy in which the ovum became attached to the posterior uterine wall, and derived muscular fibres from its locality. The fact that a continuity of muscular fibres from the normal uterus to the adventitious uterus might be ascertained upon microscopical examination, would prove nothing as to the nature of the pregnancy. Dr. Byford's case resembled that of Jauverin, in which the ovum lodged on the posterior uterine wall, and developed in this situation, involving the posterior wall in its sac. The specimen was worthy of more exact investigation, and should be placed in the hands of a competent pathological anatomist.

Dr. Sawyer said that abdominal pregnancy, with location of ovum on posterior uterine wall, was not at all improbable. He then referred to Bischoff's and Leopold's observations and experiments with relation to the "external wandering over of the egg." Beigel had ridiculed this idea. It was like a blind man introduced into a large, empty room, with a thread in his hand, seeking to find and thread the eye of a needle located in some indefinite quarter of the room. Notwithstanding the sarcasm, the fact of the external wandering over of the egg was a matter of positive knowledge. The egg may pass from one ovary to the opposite fallopian tube through the abdominal cavity. He thought the specimen exhibited was one of abdominal pregnancy.

Dr. Dudley thought the fact of the external wandering over of the egg was not disputed at the present time. Playfair in his treatise on midwifery gave a clear exposition of the subject.

Dr. Charles Warrington Earle said that the fact of external wandering over of the egg was fully recognized twelve years ago.

Dr. Sawyer said the ovum in abdominal pregnancy might be attached to the posterior wall of the uterus, the mesentery, under surface of the liver, or to other viscera.

Dr. Nelson made the remark that in both of the cases cited by Dr. Byford, *decidua* had been cast off by the uterus.

Dr. Jackson said that Fränkel was of the opinion that the formation and extension of a *decidua* was a constant occurrence in extra-uterine pregnancy. It was pathognomonic of the condition.

Dr. W. H. Byford was not surprised that certain members did not agree with him in his diagnosis. He thought that in the first case the fecundated ovum passed through the tube, but had found some diverticulum in the uterine cavity, and had passed into the posterior wall, and developed in this region, pushing the wall before it. Some of the reasons for this position were as follows:

The muscular elements of the sac were directly continuous with the uterine muscle. He did not believe that such a muscular sac could develop adventitiously in the abdominal cavity. He had seen cases of abdominal pregnancy, with no muscular fibres in the sac. The head presentation, down deep in the pelvic cavity, in the direction of the resultant of the forces developed by uterine contractions, supported his view of the case.

It is not necessary for the production of mural pregnancy that the tubes be involved. He thought there was much in the remarks of Dr. Nelson and Dr. Dudley. In cases in which there was sufficient contractility, it was best to remove the placenta. Even under these circumstances, it was not absolutely necessary. There was no danger in allowing the placenta to remain.

Finally, he was very positively of the belief that the two cases referred to in his paper were examples of mural pregnancy. The peritoneum was a boundary line between mural and abdominal or peritoneal pregnancies.

Dr. Sawyer asked the question, "Is the peritoneum a boundary line of importance in the macroscopical or microscopical differential diagnosis between abdominal and mural pregnancies?"

Dr. Jaggard, in reply, said that the peritoneum was no barrier. What was the peritoneum? Dr. Etheridge, in an article on "Chronic Adhesive Perimetritis," published in a recent number of the *Chicago Medical Journal and Examiner*, had ably sketched the anatomy of this membrane. It was developed out of connective tissue, according to Rindfleisch and other distinguished anatomists. It offered absolutely no barrier to the attachment of the ovum to the posterior uterine wall, and its development in this situation, with the derivation of muscular elements from the normal uterus.

On motion, Drs. Byford, Merriman, and Jaggard were appointed a committee to select a competent pathological anatomist, who did not belong to the Society, to examine the specimen and report at the next regular meeting. It was specified in the resolution that the *pathologist should be amply paid for the labor*.



Dr. Etheridge then exhibited a placenta with calcareous deposits. The placenta was removed from the body of a woman, pregnant for the first time, who had probably carried the fetus 292 days. The calcareous deposit was probably the result of fatty metamorphosis of the upper layers of the *decidua serotina*.

Dr. Sawyer said the placenta was interesting, but not uncommon. It has been erroneously believed that such *placentae* are of syphilitic origin. He thought the connection with prolonged gestation was established.

Dr. Dudley referred to the calcareous deposit in the wall of the arteries supplying an ovarian cyst, which he had removed some years previously.

Dr. Jackson related the history of a case in which he had removed a mass of calcium carbonate situated in the recto-vaginal septum, one and one-half inches from the vulvo-vaginal orifice. There was no fatty metamorphosis in this case.

Dr. Earle thought there was an unreasonable tendency to ascribe such cases to the effects of syphilis. Hydatidiform degeneration of the chorionic villi and *hydrops amnii* received a similar erroneous etiology.

Dr. Etheridge said that the deposits were com-

posed of phosphate and carbonate of calcium. These salts had an affinity for albumens, and fatty acids present in the cotyledons. Similar calcareous deposits were met with in fibroids, thrombi, encysted trichinae, and in the lithopædia of extra-uterine pregnancy.

Dr. W. H. Byford thought the connection between prolonged gestation and calcareous deposits in the placenta was established. He thought that Dr. Etheridge would find on microscopical examination that the changes had occurred exclusively within the vessel walls.

The Society then adjourned, to meet on the third Friday evening in January at the residence of Dr. E. C. Dudley, No. 2317 Indiana avenue, at eight o'clock.

The business of the next meeting will consist of:

1. Report of pathologist, Dr. Christian Feager, on Dr. Byford's specimen.
2. Exhibition of specimens from a double ovariectomy, by Dr. E. C. Dudley.
3. Discussion of certain methods by which the second stage of labor may be rendered easy, by Dr. Henry F. Byford.

W. W. JAGGARD, M. D., *Editor*.

2330 Indiana Avenue, December 22, 1884.

## EDITORIAL DEPARTMENT.

### PERISCOPE.

#### Hydrochlorate of Cocaine in the Nose and Throat.

Dr. E. Fletcher Ingals thus writes in the *Jour. Am. Med. Ass.*, November 22, 1884:

After having noticed the statement by M. Du Cazal, that tincture of coca would relieve painful affections of the throat, I made several trials of the remedy, but failed to get satisfactory results; and since the publication of Dr. Agnew's report on the hydrochlorate of cocaine, being unable to obtain any of the latter, I have made trials of a strong solution of the extract of coca, and also of citrate of caffeine, which, from its close resemblance to cocaine, I hoped might produce similar local effects; but in both I was completely disappointed.

I was unable to obtain any of the hydrochlorate of cocaine until the 13th of this month, when I received a 2 per cent. solution from New York. My first trial was in a healthy subject, who, however, had a very sensitive Schneiderian mucous membrane. I ascertained by experiment that, with the moderate pressure applied, only about 10 per cent. of a spray applied to the nostrils would be lost. I then applied the solution in the left nasal cavity, first by a spray, and afterward by a hypodermic syringe fitted with a long probe-like nozzle. I applied in this case 26 minims of the solution during the space of forty-five minutes, from two to four minims being applied at intervals of three to six minutes, with the following result: Fourteen minutes after the first application there was a decided loss of sensibility,

though pressure caused pain. In thirty minutes anæsthesia was nearly perfect, 18 minims having been used, and in forty minutes sensitiveness was returning. In forty-five minutes the membrane was quite sensitive, and in fifty minutes sensibility was almost normal, notwithstanding the continuous use of the cocaine. The soreness caused by the probing caused considerable pain, which radiated to the eyes and side of the head, and lasted for three or four hours.

Case 2. Male, aged 19. Naso-pharyngeal fibroma. In this case a portion of the fibrous growth, which was attached to the side of the posterior border of the septum, had to be cauterized.

Two previous cauterizations had given the patient very severe pain, which "shot through his whole head." The nasal cavity was first washed out with Dobell's solution, and afterward with a weak solution of hydrochloric acid. It was then dried by absorbent cotton, and the two per cent. solution was applied with the syringe to the part to be cauterized.

I used thirty minims during thirty-six minutes, in quantities of four to five minims every five minutes, with the following results: In seven minutes sensitiveness was considerably diminished. In fourteen minutes sensitiveness greater than before. Thirty-six minutes after the first application, half a drachm of the two per cent. solution having been applied, he could feel the probe, but it caused no pain excepting in one spot. I then applied the cautery thoroughly about three times as long as on previous sittings, causing very little pain—he thought about one-tenth as much as formerly.

Case 3. Male, aged 62. At two previous sittings I had removed from this gentleman's nares large mucous polypi, but to-day I found the base of one springing from the middle meatus of the right side. I dried the parts with cotton, and during ten minutes applied ten minims of a two per cent. solution as thoroughly as possible immediately about the polypus. Nineteen minutes after the first application, I removed the polypus with snare and forceps, and then cauterized its base with the galvano-cautery. He said the pain was very slight, not more than one-tenth what he had experienced from previous operations of the same character. He was exceedingly pleased at the result.

Case 4. Male, aged 34. Nasal polypi, with exceedingly sensitive Schneiderian mucous membrane. Applied first five minims of a two per cent. solution, five minutes later four minims more. Six minutes later parts not sensitive to probe. Cauterized base of polypus in middle meatus with galvano-cautery, with about one-fifteenth the pain he had experienced from a similar operation a week previously.

Case 5. Male, aged 29. Hypertrophic catarrh. This patient came from Iowa, and as he wished to return the same evening, I desired to relieve him as completely as possible at one sitting. To the left naris, which was very sensitive when touched with the probe, the two per cent. solution was applied as in the preceding experiments, in quantities of one to four minims at intervals of one to four minutes, with the following results: There was some numbness at the end of seven minutes, and very little sensitiveness at the end of eleven minutes, but eight minutes later, notwithstanding the continual use of the drug, the sensitiveness was about the same. I then transixed the lower turbinated body, and applied the snare without pain, though he felt it; but when the snare was tightened, considerable pain was experienced. Three minutes later the sensitiveness of the part was about one-third that of the side not treated.

While doing this operation I received word that the cocaine ordered from Germany had arrived. I immediately sent for it, and had a four per cent. solution made.

Second trial in case 5. An hour and a half later I applied the four per cent. solution to the right naris. The cavity was first dried with cotton and twelve minims applied in quantities of one to two minims at intervals of two or three minutes during twenty-three minutes, at the end of which time he said the sensitiveness was more than at first, though it had been much obtunded ten minutes earlier. I then swabbed out the naris carefully and applied four minims more of the solution. Five minutes later I cauterized the inferior turbinated body thoroughly, causing about one-fourth the amount of pain ordinarily experienced from similar though much shorter operations.

Case 6. Female, aged 33. Anosmia dependent partially on submucous thickening of the upper part of the septum, which was swollen so as to protrude three-sixteenths of an inch. I first dried the mucous membrane with a jet of compressed air and then applied the four per cent. solution by means of the syringe, dropping upon the surface half a minim every half minute for three

minutes, and afterward every three minutes until ten minutes had elapsed, when I found anaesthesia of the part complete. I then cauterized the swollen tissue thoroughly, passing the hot wire twice through its base without causing the slightest pain. A similar operation in the opposite naris had previously given this patient severe pain.

Case 7. Male, aged 21. Deflection of the septum with exostosis forming a spur one and three-fourths inches long, projecting a fourth of an inch from the normal plane of the septum and decreasing the normal calibre of the air-passage eighty per cent. The nasal mucous membrane was unusually sensitive. I applied a loose pledget of absorbent cotton below the spur, and having dried the membrane with the jet of air, repeatedly dropped upon the upper surface of the spur, from one end to the other, a four per cent. solution; averaging half a minim every half minute for the first six minutes. Some of this ran down into the cotton below the spur, but at the end of several minutes from the first application, when the upper surface was completely benumbed, I found the lower still acutely sensitive. I then removed the cotton and dried the passage with the air jet and applied more of the solution in the same manner as before, both above and below the spur. Twelve minutes after the first application, having used eight minims of the solution, I found the parts to be operated upon completely anaesthetized. I then sawed off the spur (this part of the operation requiring about four minutes), without causing the slightest pain. In removing the detached bone, some pain was caused by touching the outer wall of the naris, which I had not attempted to anaesthetize. Twenty minutes after the first application, sensibility was rapidly returning, and five minutes later the parts were again sensitive to the probe.

Case 8. Mrs. W. Small cystic tumor at the lower part of the left side of the base of the tongue, about half an inch below the tonsil, with several diseased follicles in the tonsil filled with their desiccated secretions. I wished to destroy part of these with the galvano-cautery. But the patient so feared pain that I attempted to benumb the parts by injecting on the upper part of the tonsil the four per cent. solution, which trickled down so that I supposed the membrane over the cyst would be reached. Five minims were used in the course of five minutes, the mouth being kept open. Three minutes later the patient complained of something being lodged in her throat which made her retch and nearly caused vomiting; this sensation, which was due to the benumbing effects of the cocaine, lasted about five minutes. As soon as the tendency to retch ceased, I destroyed the cyst with the galvano-cautery, but the anaesthetic effect of the cocaine seemed to have entirely disappeared.

Case 9. Male, aged 31. Hypertrophic catarrh. Dried the parts with the blast of air, and then applied the four per cent. solution of hydrochlorate of cocaine to the inferior turbinated body of the right side, eleven minims in thirteen minutes, from one-half to one minim every minute.

In this case, as in others of hypertrophic catarrh, the solution caused the swelling to almost completely disappear by the time the anaesthesia was complete.

The turbinated body was cauterized thoroughly without pain. The patient complained of a sense of dizziness and slight dyspnea for ten minutes, but had no unpleasant sensations afterward.

Case 10. A little girl, aged 6. Adhesion of turbinated body to septum, causing stenosis of right naris.

Applied the solution as in the last case, excepting that half of it was used with the atomizer and only eight minims were employed.

In fourteen minutes anæsthesia was complete, and the adhesions were broken down without pain.

Second application in case 2. On the patient's next visit to my office, I applied the four per cent. solution to the naso-pharynx, which still contained quite a large mass of the fibrous growth. He has always complained bitterly on any manipulation of the part; but after having used ten minims by the atomizer, a minim every minute, the surface was anæsthetized; however, by the probe I found that deeper parts were still sensitive.

I then introduced, by means of the probe-pointed syringe nozzle, six minims more in various places where the contact of the probe caused pain. In twenty-five minutes the parts were so thoroughly anæsthetized that I commenced the operation of removing the mass with cutting forceps. The operation lasted about ten minutes, and gave no pain excepting in one small spot, though he said he felt the instrument whenever introduced or moved.

From my experience with cases one to five inclusive, I concluded when the solution is applied in the naris every four or five minutes a partial anæsthesia occurs in ten or fifteen minutes after the first application, and that it is followed, like the first effects of ether when given slowly, by a period of two or three minutes of exalted sensibility, and that if its use be continued (possibly without further use) the maximum effects of the anæsthetic are quickly reached. The anæsthesia disappears in about five or ten minutes. These cases also suggest the query, whether, after a short time (thirty to forty-five minutes) it might not be very difficult to maintain anæsthesia even by repeated applications? These same cases also convinced me that a two per cent. solution is not ordinarily strong enough for use in the nose. From all the experiments, I conclude also that the drug does not act satisfactorily unless the mucous membrane is free from secretions; and wiping out the nasal cavity with cotton, though it dries it for a few seconds, excites excessive secretion directly afterward, therefore drying may be much better accomplished by the jet of air.

These cases, as far as they go, also suggest the advisability of overcoming the sensitiveness as quickly as possible by frequent applications, which keep the surface constantly bathed in the solution. When used in the fauces, it was entirely unsatisfactory in one case, but I attribute this partly to the particular patient and partly to the imperfect application of the solution. Dr. Solis Cohen's experiments with it in the larynx have not been satisfactory, but we will doubtless soon learn how to obtain better results from its use in the fauces and larynx.

One of the remarkable properties of this drug,

which I observed when I first applied it to the swollen mucous membrane of the turbinated bodies, is that of causing prompt and rigid contraction of these tissues. This action has proven to be uniform, and I have learned by experiment that the contraction may continue several hours. This property will render the cocaine almost a specific for the relief of the "stuffing up" of the nose which occurs in acute colds, hypertrophic catarrh, and hay asthma, as well as for the throat deafness, which results from swelling of the mucous membrane lining the Eustachian tubes.

#### Voluminous Enemata of Nitrate of Silver in Chronic Dysentery.

Before the Clinical Society of London, November 14, 1884, Dr. Stephen Mackenzie read a paper on this subject. He alluded to a former series of cases he had brought before another society, and stated that extended experience had strengthened his belief in the value of large enemata of nitrate of silver in the treatment of cases of chronic dysentery or dysenteric diarrhoea. The mode of procedure he adopted was as follows: The quantity of nitrate of silver to be used was dissolved in three pints of tepid water in a Leiter's irrigating funnel, which was connected by India-rubber tubing with an esophageal tube with lateral openings. The patient was brought to the edge of the bed, and made to lie on his left side, with his hips well raised by a hard pillow. The terminal tube, well oiled, was passed about eight or ten inches into the rectum, and the fluid allowed to force its way into the bowel by gravitation. The injection rarely caused much pain, and often none. It usually promptly returned; but, when long retained, it was advisable to inject chloride of sodium, to prevent absorption of the silver salt. Various strengths had been used, from thirty to ninety grains to three pints of water; but usually one drachm of nitrate of silver was employed. The treatment was based on the view that, whatever the nature of dysentery, whether constitutional or local, in the first instance, the later effects were due to inflammation or ulceration of the colon, which was most effectually treated, as similar conditions elsewhere, by topical measures. Sometimes one, sometimes two, injections were required, and in some cases numerous injections were necessary; but in all the cases thus treated, many of which had been unsuccessfully treated in other ways previously, the disease had been cured. In most cases other treatment was suspended, but in some, Dover's powder or perchloride of iron, which had been previously administered, was continued or subsequently prescribed. The cases narrated were these: 1. One in which the disease had lasted several years on and off; two injections were used, and the case was cured in six weeks. 2. Second attack, duration uncertain; four injections used; cured in five weeks. 3. Duration two months; two injections used; cured in three weeks and a-half. 4. Duration five years; one injection used; cured in three weeks. 5. Duration eighteen months; two injections used; cured of dysenteric symptoms, but remaining under treatment for diabetes. 6. Duration fourteen months; one injection used; cured in seven weeks. The treatment, which

laid no claim to novelty, was brought forward to elicit the experience of others who had tried it, or to induce others to employ it in suitable cases.

Dr. Carrington gave as a reason for doubting the probability of Dr. Mackenzie's results being repeated, his own unsuccessful employment of the remedy used; but, in view of the favorable termination of the recorded cases, he had determined to give the method a new trial.

The President pointed out that the mode of treatment adopted did not originate with Dr. Mackenzie, and that that gentleman had carefully insisted on this fact.

Dr. Cullimore asked for information as to the duration of allied cases of disease treated in the hospital by other methods than that practiced by Dr. Mackenzie, and also whether the author of the paper was inclined to confine such treatment to cases of rectal dysentery, or to apply it to others as well. He commented on the fact that most of the cases recorded were those of sailors, and suggested that the favorable result might be, in great part, due to the improved surroundings of the patients, the physiological rest and appropriate diet, etc., afforded in hospital, as compared with the depressing surroundings of an existence on board ship. In his own experience of the treatment, he found that pain was produced, in one case, on the injection of two pints of water, holding forty grains of silver-nitrate in solution. In another case of dysentery, due to famine, he injected half a pint of water containing iodoform, but without effecting any good result. Opium and krameria were, in his opinion, the most useful remedies in this class of cases.

Dr. Dyce Duckworth had only resorted to the treatment by injection of silver-nitrate solution once; but one injection was made, and the result was not satisfactory. It should be remembered, he urged, that all so-called cases of dysentery were not alike. The disease varied much in different individuals, as was the case also with many other forms of disease, and this fact had not been sufficiently recognized by writers on tropical affections.

Dr. B. O'Connor asked how long a time had elapsed between the adoption of the treatment and the present.

Dr. S. Mackenzie said he had purposely used the term chronic dysentery, or dysenteric diarrhoea, in writing his paper, as being most appropriate to the kind of cases under discussion, these being characterized by teasing diarrhoea and considerable constitutional disturbance. In a previous paper, he had explained that the physicians at the Seamen's Hospital had spoken hopelessly of all kinds of treatment; but at the London Hospital, greater opportunities existed for making observations in this respect than at any similar institution, with the exception of the one just named; and in all his own cases, the effects of rest, opium, etc., had been tried in vain before resort was had to the injection-method of treatment. He alleged that rebellious cases were cured by the enema, and that it was, therefore, a resource to be adopted whenever the ordinary remedies failed. He himself would adopt it in ordinarily severe cases at the outset of treatment. He had no definite statement to make as to the permanence of the cure, the class of patients con-

cerned being the most difficult of any to keep under observation; but, in this connection, it might be interesting to the Society to know that one patient cured by him had returned twelve months after being discharged, not on his own account, he being still well, but to solicit Dr. Mackenzie's good offices in behalf of a friend who was suffering, as he had been, from chronic dysentery.

#### Russian Baths.

In order to determine the influence of daily Russian steam baths on the healthy system, Dr. V. V. Godlevsky (*St. Petersburg Inaugural Dissertation*, 1883) made a series of careful observations on two quite sound and strong men, who, for the first ten days, daily took a simple vapor-bath, and then, after an interval of another ten days, daily took a vapor-bath, with rubbing and beating the skin by a *venik* (a bundle of birch twigs with leaves.)

The effects, as enumerated by the author, were as follows:

1. The pulse and respiration considerably increased in frequency.
2. The circumference and expansion of the chest became somewhat larger.
3. The energy of expiration and inspiration decreased.
4. The capacity of the lungs decreased.
5. The axillary and rectal temperature rose.
6. The weight of the body fell considerably.
7. The volume of the limbs increased.
8. The circumference of the belly decreased.
9. The muscular strength of the hands lessened slightly, and that of the feet and abdomen considerably.
10. The daily amount of urine decreased, but its density increased.
11. The excretion of nitrogen was considerably increased, the increase lasting for five days after completing a series of baths.
12. The excretion of phosphoric and sulphuric acids also increased, but less considerably.

The action of baths with the application of a *venik* is more powerful than that of simple vapor-baths.

The author thinks that vapor-baths administered daily for a certain more or less prolonged time may prove useful: 1, as a means of intensifying the process of metamorphosis in tissues; 2, as a powerful revulsive; 3, as a sudorific; 4, as a means of improving the action of the skin.

Accordingly, Russian baths are indicated: (1) in chronic muscular and articular rheumatism, as well as in gout; (2) in secondary and tertiary forms of syphilis; (3) in scrofula; (4) in obesity, and in plethora from overfeeding and sedentary life; (5) in the initial stages of catarrh of the nose, throat, bronchi, lungs, bowels, and bladder; (6) in chronic catarrh of the external auditory meatus (as recommended by Dr. Strom), the pharynx, tonsils, and nose; (7) in chronic inflammation of the spinal cord and its membranes (as recommended by Bartels, Frey, and Heiligenthal), and in hypochondriasis; (8) in chronic congestion of the liver, spleen, stomach, bowels, as well as in the algid stage of cholera; (9) in rheumatic, scrofulous, and syphilitic disease of bones; (10) in intermittent fever (in the stage



of rigor); (11) in apyretic cases of ascites and serous pleuritis, and non-cardiac dropsy; (12) in hydrophobia (Sanjez, Buisson, Turkish baths in hydrophobia were recommended by Dr. R. Neale); (13) possibly, in diabetes, as well as (14) in the cases where the formation of biliary and cystic calculi may be suspected.

The contra-indications for Russian baths are as follows: (1) all rather prolonged acute febrile diseases; (2) tendency to hemorrhage; (3) general weakness and exhaustion after acute diseases; (4) acute affections of the eye and ear; (5) uncompensated diseases of the cardiac valves, fatty degeneration of the heart, arterio-sclerosis of higher degrees, and aneurism; (6) tendency to pulmonary and cerebral congestion, plethora of higher degrees; (7) considerable pulmonary emphysema, phthisis in the last stage; (8) obstinate constipation from atony of the intestines; (9) pregnancy with tendency to abortion; (10) very hot Russian baths are contra-indicated, also, in the cases of old people, and infants.

#### Emetics in Hysteria.

Dr. Peyton Turner thus writes in the *Texas Courier-Record of Medicine*, November, 1884:

The administration of emetics in hysteria would no doubt be regarded as a rather severe measure by some practitioners, myself for one, were they employed indiscriminately. Obstinate cases, however, present themselves not infrequently, denoted by a recurrence of the convulsions, coma, etc., after restoration to complete consciousness by anti-spasmodics, cold douche, etc., and it is this class of cases in which emetics are especially valuable; in fact, where the usual remedies fail I have been led to believe from experience that the emetic treatment is probably the most efficacious at our command, and more especially when the paroxysms come on after the ingestion of food. No remedy should be extolled as curative without a reasonable trial of its merits, and to give a medicine we know will vomit alike in every case, would be incompatible with a proper course to pursue, and alike injustice to our patients. We know the effect of emesis on the nervous system, and this would probably explain in a nutshell their manner of controlling hysterical convulsions, and cases do sometimes present themselves in which this treatment is not only justifiable but imperative; and to make their usefulness more apparent, I herewith append a succinct report of several cases:

Case 1. I found in a semi-unconscious condition, globus hystericus well-marked, and without delay I gave an emetic, which was followed by free vomiting and a subsidence of all the symptoms. I will presently explain why I gave an emetic in this case.

Case 2. I was called to attend at midnight, and found her in hysterical coma. I managed to get a thimbleful of zinc sulphate down her, and when it began to act, it seemed to restore consciousness and all the normal functions at once, and she forgot to get sick any more that night. This case was a negress.

Case 3. I was called hurriedly to attend a lady at a hotel who was supposed to be dying from the effects of some poison. I diagnosed hysteria.

She was having violent convulsions, alternating with coma. In this case I used anti-spasmodics freely without any signal benefit. I then tried the cold douche, which seemed to have a happy effect in ten minutes, but was only momentary; the convulsions would recur with such violence that four men could not hold her. I then tried fifteen grains of zinc sulphate, free vomiting ensued, and a cure was at once effected.

Case 4th was in a similar condition as the last, the usual remedies proved futile in like manner; the sulphate was administered with precisely the same results.

These four cases are the only ones in which I have given emetics, as I always try the common remedies first, and I find them successful in a large majority of the cases.

The first case here mentioned happened in my practice years ago, when I was a *kid*, and was practicing at that time in Louisville, Ky. The woman's husband came after me (probably because he could not get another doctor) in a great hurry, saying for God's sake to come as quick as I could, as his wife was about to strangle. This threw me completely off my guard, and as I had just "hung out my shingle," I was more than anxious to go with him, and was ready at a moment's notice. It was about four blocks to his house, and sure enough I found the lady as I thought strangling to death, and grabbing at her throat as if she wanted to tear the trachea out by the roots. It scared me within an inch of my life; she was moaning terribly, and I studied what in the — could be the matter with her. I tried to look very knowing, and her husband partly relieved my embarrassment by telling me she ate an apple the day before, and maybe the core had lodged in her throat. I examined her throat, but could see no core, not even a red spot that I could tell him was a *pathological condition of the capillary blood vessels*, but I told him the core was further down than I could see, and that an emetic would be the most scientific treatment; so I prescribed zinc sulphate, and, after explaining to him how it would produce *inverted peristaltic oesophageal action*, took my departure, after assuring him that I would return about the time this action was taking place. I went back to my office as quick as I could (I almost ran when out of sight), got my medical works, and glanced hurriedly over the articles on *foreign bodies in the air passages*, but they did not seem to fit the case. My time being up, I went back, and found the inverted action of the cardia and oesophagus taking place as I told him it would, and after free emesis the patient was all right. A little girl stepped up to the bed and said, "Lor' me! Ma's got so she can talk since the doctor come."

These little incidents in mistaken diagnosis serve to remove the motes from our eyes, banish self-conceit, enliven us to the responsibility of our profession, substitute a further desire for investigation and knowledge; and we should ever be ready and willing to acknowledge the corn and be profited thereby.

—It is said that the application of a decoction of valerian root, an ounce to the pint, often relieves completely the pain of contused wounds.



## REVIEWS AND BOOK NOTICES.

## BOOK NOTICES.

**Surgical Handicraft: A Manual of Surgical Manipulations, Minor Surgery, and Other Matters Connected with the Work of House Surgeons and Surgical Dressers.** By Walter Pye, F. R. C. S. 8vo., pp. 544. Price, \$5.00. P. Blakiston Son, & Co., 1884.

There is a certain degree of novelty in the plan of this work which will recommend it to a wide circle of readers. Although written for an English public, and, in some respects, not quite suited to the surgical conditions of American life, the hints and instruction it gives are good everywhere.

The author begins with a section on the arrest of hemorrhage; this is followed by sections on apparatus for restraint and support, such as splints, bandages, etc.; on the immediate and permanent treatment of fractures; on the dressing of burns, wounds, ulcers, etc.; on cases requiring long mechanical treatment, as hip and spinal diseases; on surgical emergencies, as hernia, shock, drowning, and the like; on the administration of anæsthetics, and on pulling teeth, and such minor operations. A formulary and a good index close the volume.

It will be seen from this epitome of the contents that this is a very handy book to have on one's shelves, containing a great deal of just such information as the young physician likes to have at his fingers' ends, and a description of the latest and best methods of doing familiar things, that the old physician can profit by learning. It is reasonably well illustrated, and the mechanical preparation of the book is fairly done.

**A Theoretical and Practical Treatise on Hemorrhoidal Disease, Giving Its History, Nature, Causes, Pathology, Diagnosis, and Treatment.** By William Bodenhammer, M. D. 8vo., pp. 297. Wm. Wood & Co., New York, 1884.

There is, as the author says, room for a monograph on piles, but for a treatise of three hundred large octavo pages, there scarcely is room. A limit should be drawn to the size of a monograph. If the whole of medicine and surgery were written up on this scale, a physician would have time for nothing but reading. He does not make his living by reading, however, and it were well for both writers and publishers to remember this.

Apart from its needless prolixity, the work of

Dr. Bodenhammer is a good one. It goes at great length into the history of the complaint, traces it from the dawn of history to the present day, explains the etymology of the name, gives a host of opinions of every debated subject with reference to it, and is full on the treatment.

For the young physician who has plenty of time on his hands and inclines to make a prolonged study of hemorrhoids, this would prove a satisfactory book. The "busy practitioner" will find life too short to undertake monographs of this magnitude.

**Transactions of the Michigan State Medical Society for 1884.** Lansing, Mich., 1884.

This is a neatly-printed pamphlet of about 200 pages, containing the usual proceedings and a number of original articles. Many of these are of marked merit, and in looking over them we cannot but regret that they should be buried in a volume of proceedings quite sure not to be seen but by a few hundred at most of the 50,000 reading medical men in the United States.

The subjects of the papers are: "Nasal and Aural Catarrh," "Chronic Inflammation of the Ear," "Granular Lids," "Placenta Previa," "Diphtheria," "Uterine Displacements," "Dysmenorrhœa," "Prostatic Hypertrophy," and similar topics of general and immediate interest to the practicing physician.

The number is one every way creditable to the Society and to the profession of Michigan.

**Fourth Annual Report of the State Board of Health of New York.** 8vo., pp. 448. Albany, 1884.

The increased attention to sanitary science is a cheering sign of modern legislation. Every state in the Union should have a well-organized and active Board of Health, which should publish every year a series of local investigations, such as are in the volume before us. It contains a number of reports on outbreaks of diphtheria, malarial fever, enteric fever, rubeola, typhus, and on milk, kerosene oil, glucose, pond nuisances, drainage, etc., all of them topics which immediately interest the lives, health, and comfort of thousands of citizens. The time will come when the gross neglect of such matters which now prevails in this and other States will be recorded in history as a proof of the low and semi-barbarous condition of our pretended civilization.

The New York report will be found a very instructive one by hygienists. It is embellished with maps and diagrams. Its statistical tables are full, and several illustrations from the microscopical work of the Board are inserted.

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**CAPITAL PUNISHMENT.**

We took occasion some time since to note that popular opinion in England is setting strongly against capital punishment. The leading journals and the leading minds are asking whether the purpose which it is designed to fulfill, namely, that of preventing crime, is being accomplished by it; and they seem inclined to hold the negative view, and to regard capital punishment as an unsatisfactory institution, while the *London Lancet* even goes so far as to hold up to ridicule the idea of a great nation like England strangling its malefactors. The advisability of capital punishment has occupied the serious attention of some of the greatest men that have ever lived, and arguments *pro* and *con* have not been wanting.

Judging from the experience of the past few years in this city, we would be inclined to think that popular opinion is setting against hanging as a punishment for crime, and that we are commencing to look upon capital punishment as but little, if any, better than judicial murder. Of course, we cannot afford, in the interests of civilization, to allow men to go free who are capable of killing their fellow-creatures; but whether we have the right to kill in turn, seems to be a question that is open to argument.

The fact that we have now in our prison a condemned murderer, who has been incarcerated for five years, in whose case the Supreme Court refused to interfere, and who has just now, after these long years of waiting, been refused clemency by the Pardon Board, is an argument tending to show that those presumably intelligent men who have charge of the administration of justice are very loth to hurry to death a human being.

The fact that a convicted murderess, relieved from the extreme penalty of the law on the ground of insanity, and committed to an asylum but a year ago, is now making what may be presumed to be a successful effort for restoration to absolute liberty, is but another argument in favor of the point we make, that popular sentiment in America is tending rather away than towards the idea of human vengeance. For, after all, it is but ven

geance. When a man is carried by passion or by liquor to the point that will induce him to kill a fellow-being, he has very little thought for the prospective punishment that awaits him. Of course, we all realize that capital punishment was not designed as an act of vengeance, but rather as a means of intimidation, of prevention against crime; but that it does not fulfil its intended purpose is, we imagine, becoming very evident.

Does it not seem brutal, to say the least of it, to put a rope around the neck of a man, and drag him up as we would a bull or a pig, until we have either choked the life out of him, or broken his neck? And does it not seem even more brutal when we realize that this action is taken by the order of men (and a man who for his assumed intelligence has been selected to sit in judgment on his fellow-men) who quietly and deliberately determine that a fellow creature shall be launched into eternity.

We do not for one minute wish to be understood that murderers should be allowed to go at large—by no means; but we do say most emphatically that no man, or body of men, can reasonably have the right to condemn a fellow-man to death. Murderers should be confined where they will have no power to work further mischief—this, we all concede; but at the same time, we can conceive of no right to *kill* a man because he has killed another.

It is the duty of physicians to enlighten the public on subjects like these; hence, we have felt called upon to write these words. In these days of civilization and advancement, let us consider well whether capital punishment is not a great blot upon our civilization, and let us look to it whether we are not harboring a relic of barbarism. Justice, law, and order, must be maintained; the man who interferes with the rights of his fellow-man must be punished; he whose liberty is dangerous to the welfare of his neighbor must be restrained of his liberty; but we again say that we doubt very much whether the proper way to accomplish this purpose is to deprive him of his life, and we imagine that popular sentiment joins in this doubt.

#### THE INCREASE OF THE OPIUM HABIT.

While visiting a patient in this city, we were led to inquire about a woman whom we had previously attended in the same house. The reply was that she had disappeared two days before, ostensibly going out for a walk. The suggestion proffered to our further questioning was, that "she was passing a day or two in an opium joint." No surprise was displayed at her disappearance, and evidently it was regarded as nothing unusual or noteworthy for one of her class to indulge in a prolonged spell of opium intoxication.

A few years ago such a thing was utterly unknown in the eastern United States; and when Dickens, in *Edwin Drood*, described such a den as he had seen it in one of the lowest slums of London, the English-speaking world scarcely understood him.

It is very different now. Here in Philadelphia, still more in New York, there has been a rapid introduction of opium-smoking during the last five years. There are no prohibitory laws against it, at least none that are effective; and the vice is all the more dangerous because it does not involve the victim in any public scandal, as does the act of drunkenness. The opium slave finds the "joint" fitted up with comfort, often in a quiet second-floor room, where the other indulgences of tobacco and liquor are also at his command. He can recline long hours in easy-chairs or on a sofa, and is not turned out at night to walk unsteadily home, as these places are for the use of their patrons at all times.

Companionship of both sexes, when he wants it, is at hand, for this seductive vice has its votaries in both. The woman who has lost her family ties and who has forfeited her own self-respect, finds in the dreams of opium that delusive happiness which she thought had forever been lost to her.

In his essay recently noticed in this journal, Dr. Meylert states that there are many indications that the opium habit is increasing in this country. He adduces several, and adds the suggestion, that doubtless many deaths of patients in hospitals and asylums, of prisoners, soldiers, etc., attrib-

uted to other causes, are really due to sudden deprivation of opium.

All experts are aware of the secrecy with which this indulgence is often guarded. Instances are not rare where a wife has for years been an opium habitué without the knowledge of her husband. We cannot form an estimate of its exact prevalence on account of this secrecy. But it is a formidable and increasing vice, commanding our most earnest solicitude; of this there can be no doubt.

#### COMPULSORY VACCINATION.

In a government of the people it is not always easy to draw the line between too great personal liberty and its just restriction.

Nowhere is this more difficult than in what pertains to the health of the community, and nowhere, we may add, are people more intolerant of restriction than in precisely this direction. That they should be asked to sacrifice, or even to jeopardize their interest to protect the health of others, is something they are very unwilling to admit. This is constantly seen in matters of quarantine and embargo. They ever encounter an active opposition even from the parties for whose benefit they are created, let alone from those who are only indirectly gainers by them.

The prejudice against compulsory vaccination is equally obstinate, although in this case it cannot be averred that such a measure interferes with anybody's profits, or with the sacred laws of trade. The opposition is indeed largely sentimental, and absolutely devoid of rational basis.

It arises in part from the dissemination of false information by a set of alarmists, who thereby seek a little notoriety which they cannot get through more creditable means, partly from a sensitiveness lest the liberty of the individual should be encroached upon in other ways if this entering wedge be allowed.

Nearly all the most intelligent members of the profession are distinctly in favor of such legislation. This is illustrated by the experience of the State Board of Health of Indiana. That body sent out a number of circulars to the principal

physicians of the State, asking their views on this important subject.

All [the reporters but one were positively in favor of compulsory vaccination as provided in the questions given. One considered such a rule to be "undemocratic." Others provided that such vaccination should be with humanized virus.

Compulsory vaccination, as considered by the committee, meant vaccination of all persons at suitable times. Admonition should always precede the enforcement of the rule, and the approach of the complete application of such rule or law should be gradual; but in times of imminent danger, such as the approach of an epidemic, or actual appearance of a case of small-pox, all the members of a community should be compelled to undergo inspection, and if not protected, to be vaccinated. As a part of this gradation of enforcement, no one should be permitted to attend any school or institution of learning, either as pupil or teacher, without first having been vaccinated.

There can be no reasonable doubt of the excellent results accruing from such an enactment; and it is entirely consistent with the most liberal construction of our theory of government.

## NOTES AND COMMENTS.

#### Nephrectomy.

The *London Medical Times* tells us that the literature of nephrectomy, a subject which has lately been somewhat prominently discussed, has recently been enriched by an account of a case to which its author rightly prefixes the term "puzzling." Abdominal section was performed on a woman, aged 52, for the removal of a large tumor due to calculous pyonephrosis of long standing. It is stated that the parts were much matted together, and that the pedicle of the tumor was transfixed and secured with a single ligature, being attached at the same time to the edge of the wound. The case did exceptionally well at first, but it was found, some hours after the operation, that no urine was being excreted, the bladder containing nothing but pus. On the second morning severe symptoms of uræmia set in, and a

fatal termination rapidly ensued, no urine whatever having been passed into the bladder since the operation. On post-mortem examination the remaining kidney was found to be healthy in every respect, with the exception of extreme anæmia and a rather excessive surrounding of fat. Microscopically, no changes could be noted in it. Unfortunately, no record is published of the visible results of the operation, except the fact that no peritonitis had taken place. The complete disorganization of the diseased kidney proved beyond doubt that all the urine must have been secreted by its healthy fellow for many months before the operation. Why, then, did the latter cease to excrete from the moment that the operation was concluded? It is to be regretted that more information is not afforded by Dr. E. Sonnenburgh, who reports the case in the *Berliner Klinische Wochenschrift*, No. 47, 1884, as to the exact structures included in the comprehensive ligature which was placed around the matted pedicle. Even on the supposition that some of the renal vessels or nerves had been so included, it would be difficult to account, however, for the production of simple anæmia, unattended by microscopical changes.

#### The Treatment of Gastrodynia.

The following instructive case of this obstinate and troublesome affection is reported in the *Medical Press*, December 17, 1884, by Dr. John W. Martin:

Miss R., æt. 30, came under my care October 3, 1884, suffering from pain in the stomach after meals, and the consequent dread of and loss of desire for food. When seen she looked quite worn and thin; complexion sallow; lips and gums anæmic; tongue whitish and lightly furred; bowels constipated. She felt a daily-increasing sense of weakness and inability to attend to her duties. Physical examination yielded negative results as regards the condition of the various organs. The case seemed one of dyspepsia consequent upon anæmia. The uterine functions were, with the exception of paleness of the menstrual discharge, normal.

I at first ordered bismuth, soda, and tr. nux vom. mixture with chloroform water; and calomel, colocynth, hyoscyamus pills to regulate the bowels. This giving no relief, I changed to pills of reduced iron and extract of nux vomica with meals, and as a laxative a mixture of sulph. mag. and mag. carb., with peppermint water. Again no relief being experienced, I placed her upon the following prescription:

R. Sodæ bicarb.,	℥ iss.
Tr. nucis vom.,	℥ xl.
Liq. morph.,	℥ j.
Sp. am. aromat.,	℥ iss.
Syrupi zingib.,	℥ j.
Aquæ menth. pip. ad.,	℥ viij.

M. ℥j. to be taken four times a day.

The relief was immediate, and so far has proved permanent. Pain is now rarely felt, and only after indiscretions as to food. Relish for her meals has returned. She is now taking the reduced iron and extract of nux vomica pills with meals, and finds decided benefit from them. The bowels are regular, the tongue clean, and her complexion and general appearance much improved.

I am inclined to think the small dose of opiate was just the one thing wanting in my previous treatment, to help the lame dog over the stile.

#### Urea Not a Cause of Uræmia.

Before the New York Pathological Society (November 12, 1884), Dr. Peabody said that at the last meeting of the society he had expressed the opinion that too much stress had been laid upon urea as a cause of uræmia, his opinion being based more or less upon observations in the lower animals. Dr. Seguin had been of a similar belief, but spoke of experiments recently made, from which it would seem that uræmic symptoms might be produced in the lower animals by the injection of urea into the blood. Dr. Seguin had since informed Dr. Peabody where he could gain access to the records of the experiments to which he had referred, and Dr. Peabody took occasion to show to the society that it would require, according to the amount of urea necessary in these experiments to produce death by injection into the circulation of the dog, one pound and a half of urea to produce a fatal result in man. But it had been shown that in a man of one hundred and fifty pounds weight, dying of uræmia occurring in the course of kidney disease, the blood contained only nine one-thousandths of a pound of urea. There might be apparent fallacies in this manner of drawing conclusions, but he thought that it showed very conclusively that such experiments upon animals could give us little information as to the cause of uræmia in man. The injection into the blood of benzoate of sodium or sulphate of sodium, agents which were not in themselves poisonous, would likewise produce uræmic symptoms. The experiments cited went no further than to show that the injection of a certain amount of any foreign substance into the circulation would produce death; they



did not show that uræmia was due to the presence of urea in the circulation. He had seen several fatal cases in which there had been entire suppression of the urine, but none of the so-called uræmic symptoms.

#### Cocaine in Diseases of the Throat and Nose.

Dr. Morell Mackenzie thus writes to the *British Med. Jour.*, December 13, 1884:

"It may be interesting to know that I have found hydrochlorate of cocaine extremely useful in operations for the removal of nasal polypi. It is not enough to paint the growth itself, nor even the parts immediately surrounding its base; the solution should, as far as possible, be applied to the whole of the mucous lining of the nasal fossa. The remedy has also proved of service, in my hands, in those cases of laryngeal phthisis in which there is great odynophagia, owing to swelling of the epiglottis. Patients, who before could swallow only with extreme pain and difficulty, have been enabled to take food with perfect ease and comfort. The best time for swallowing appears to be about ten minutes after the application, whereas operations can be done after an interval of from three to five minutes. The difference is probably to be explained by the fact that in the former case the patient feels himself, at first, unable to make the attempt to swallow, from the total abolition, locally, of all sensibility to nervous impressions. In all cases, the anaesthesia persists for about two hours. Apart from the restoration of the power of taking nourishment, much relief is given by the mere absence of pain. When it is remembered how much suffering is caused to patients with inflamed and ulcerated throats by the continual necessity of swallowing or coughing up the copious secretion which is so troublesome in these cases, it is a comfort to have at hand a remedy which renders these acts painless without in any way affecting the general system.

"Both for the larynx and for the nose I have employed a 20 per cent. solution of the drug, made for me by Mr. Martindale. I think it likely that this, or a somewhat weaker preparation, would prove a valuable remedy in hay fever, or might even prevent the attacks."

#### Strangulated Hernia—Aspiration—Recovery.

The following case, which Dr. J. H. Leslie Allen reports in the *Brit. Med. Jour.*, November 29, 1884, possesses much practical value:

"On Christmas Day, 1882, I was called in by Dr. Lawton to see a farmer, aged about 70, sub-

ject to a large right inguinal hernia. It was usually reducible, but on this occasion had become obstructed, and could not be returned, though Dr. Lawton had diligently and carefully applied the taxis, and tried all the usual accessories—enemata, fomentations, etc.—in the hope of overcoming the obstruction. The hernia was of great size, filling and distending the scrotum, and felt hard and tense from imprisoned flatus. This careful trial of the taxis having failed, it became evident that, unless relief were soon afforded, the patient would sink, as the symptoms of strangulation had been for some time becoming more urgent; yet the man was old and feeble, in bad health, and not likely to survive an operation. I therefore suggested aspiration of the flatus, and a renewed trial of the taxis. Dr. Lawton accordingly passed a small needle of the aspirator well into the distended gut, which soon became perceptibly more flaccid, and, on further trial by manipulation, the gut slipped up at once. A draught containing twenty minims of tincture of opium was then given, a hot poultice applied over the groin, and absolute rest enjoined. Next day the patient expressed himself as feeling well. Half a grain of opium was given morning and evening, to keep the bowels quiet; and, after a few days, recovery was complete, though it was difficult to keep up the hernia an account of the great size of the ring."

#### Phenic Acid in Malarial Fever.

Dr. Wm. R. Pryor thus concludes a paper in the *Virginia Medical Monthly*, October, 1884:

Reviewing all the cases I have seen in which phenic acid was used, I think its range of usefulness is very limited. In the first place its mode of administration is extremely painful; and, although I have never seen a case in which abscesses had resulted from its use, yet after a few thousand minims have been given hypodermically, the abdomen becomes extremely sensitive. I always give the solution warm and through one puncture. The resulting lump I paint over with tr. iodini. Again, when employed in very large quantities it does seem to have some effect upon the malarial poison. But it must be used in such quantities as seriously to endanger the proper performance of the function of the kidneys. I have never heard of a case of well-established intermittent fever being cured by this remedy alone. The most I have ever seen it accomplish is a slight amelioration, and that temporary, of the symptoms. I am only sorry that Case No. II. would not let me sacrifice his comfort a little longer to

the cause of science. The only circumstance where I would ever again use this method of treatment would be one where the stomach and bowels refused to retain quinine, and where hypodermics of quinia caused abscesses; or, in other words, it shall always be with me a last resort. Certain it is that it can never replace quinia preparations in the treatment of cases of malaria poisoning.

#### Cocaine in Sleeplessness.

Cocaine (or eucaïne, as our English cousins call it,) has been recommended for a variety of purposes, and now Mr. J. Swain reports the following cases in the *Brit. Med. Jour.*, December 20, 1884:

Case 1. A man, aged 33, suffering from aortic disease and albuminuria, had been troubled with insomnia for a fortnight. Three minims of a 4 per cent. solution of hydrochlorate of cocaine (equal to  $\frac{1}{8}$  of a grain) were administered hypodermically. The patient remarked that "he slept better than he had done for a long time." The following night, one drachm of valoid of coca (a liquid extract, each drachm of which represents an equivalent quantity of the pure drug) was administered. The man did not sleep well. Two drachms of the valoid of coca were then given, and sleep was induced. The patient has continued to take this dose nightly for the past three weeks, the sleep being natural and undisturbed.

Case 2. Two drachms of the valoid were given with an equally beneficial result to a patient convalescent from an empyema, and suffering from sleeplessness.

Case 3. A woman, with tertiary syphilis, was kept awake by pain in a large rupial sore on the thigh. Two minims of the 4 per cent. solution of the hydrochlorate of cocaine, dropped on the ulcerating surface, relieved the pain, and the patient slept.

To show that coca and cocaine have no toxic action—at all events, in moderate doses—it may be worth mentioning that, in a case of rheumatism, the dose of hydrochlorate of cocaine was gradually increased to six minims ( $\frac{1}{4}$  of a grain) hypodermically, and the valoid increased to five drachms, without any bad effect.

#### Permanganate of Potassium in Gonorrhœa, Leucorrhœa, and Suppurating Buboës.

Professor Roberts Bartholow thus writes in the *Medical News*, November 22, 1884:

In gonorrhœa, leucorrhœa, and suppurating buboës, a strong solution—five to ten grains to the ounce—is an efficient remedy. It has proved to

be especially so in gonorrhœa. When the attack is recent, the solution should not be stronger than two grains to the ounce, but the more chronic, the stronger the injection may be made, of course within reasonable limits. In suppurating buboës, the contents of the sac should be drawn off with an aspirator if still intact, or thoroughly evacuated if ruptured, and the cavity filled with the stronger solution mentioned above.

Lacerda's experience with permanganate in snake poison renders it almost certain that in the corresponding poison of syphilis the local application of this remedy at the earliest moment to an infecting chancre may be productive of the best results. In all forms of unhealthy and sloughing syphilitic sores—in sloughing phagedæna, for example—it deserves more extended use than has heretofore been made. Finely pulverized, it can be dusted thoroughly over the diseased surface and introduced into all the sinuities. By the same mode of application it can be used in lupus and epithelioma, and will, doubtless, be found more effective than the chlorate of potassium, which, applied in this way, has lately been much urged on the attention of the profession.

#### Kussmaul's Coma.

Before the Midland Medical Society (November 19, 1884), Dr. Saundby read a paper on Kussmaul's coma, based upon two recent cases. He described its symptoms, drawing attention to the peculiar character of the dyspnoea as constituting a distinguishing feature of pathognomonic significance. He especially insisted upon the fact that this form of coma was not restricted to diabetes, one of the cases related being an example of its occurrence in advanced renal disease. He referred to the various theories which had been advanced to explain it, and stated precisely the exact position of the acetœmia question. He explained the methods used for testing for acetone, and showed Nobel's test with nitro-prusside of sodium and ammonia. In his opinion, the symptoms were due to the action of some poison nearly allied to acetone. He referred to Minkowski's suggestion that they might be the result of de-alkalization of the blood from the presence of some acid in great excess. After discussing the predisposing and exciting causes and the diagnosis, he pointed out that it was not invariably fatal. Treatment in the early stages should be eliminatory, by purgatives, if the bowels could be got to act, and later on the intravenous injection of a neutral saline solution should be tried. The re-

sult in one case was to restore animation for the time; and where recovery was possible, more permanent results might be expected.

#### Infantile Diarrhœa.

In the *Med. Press*, November 26, 1884, are published some notes of a paper on this subject by Mr. O. Lankester, which treated of simple diarrhœa unconnected with organic diseases of the intestines. He divided the subject into the four varieties of non-inflammatory diarrhœa, inflammatory diarrhœa, choleraic diarrhœa, and dysentery. Of these four he considered only the two first varieties. He mentioned cold, bad feeding, dentition, and worms, as the chief causes, and sketched out the diet of infants. He mentioned the complications of diarrhœa, as blood in the stools, prolapse of rectum, and spoke of the use of opium in connection with the latter. Mr. Lankester next alluded to the uncertainty of diagnosis in cases of diarrhœa caused by dentition. With regard to the inflammatory diarrhœa, the causes may be the same as those of simple; also bad smells. In considering the question of diet, he spoke of the necessity of avoiding the use of milk, and advised the substitution of broth, also white wine in cases where collapse is present. He alluded to the use of mustard baths and brandy, and an antiseptic treatment, washing out the stomach, and small doses of soda benzoates frequently. In cases of chronic forms of inflammatory diarrhœa, the utmost attention should be paid to diet, and pepsin and raw meat are very useful.

#### Witch Hazel as a Hæmostatic.

Dr. W. O. Bridges thus writes in the *Therapeutic Gazette*, October, 1884:

"The editorial reference in the August number of the *Gazette* on Witch Hazel in Menorrhagia, attracted my attention on account of the seemingly beneficial results which have followed the use of the drug in various forms of hemorrhage, in my recent practice. I was prompted to its use by Ringer, who recommended it in all varieties of passive hemorrhage, his favorable results having been obtained with it particularly in hæmaturia and bleeding piles. Within the past few years I have prescribed it for bleeding piles, menorrhagia, and continuous bloody oozing from the uterus four weeks after confinement. In each one of these cases there was no further trouble after twenty-four hours. The doses which I gave were somewhat smaller than those referred to in your arti-

cle. I followed Ringer's plan of giving two drops of the fld. extract hourly. I was skeptical in regard to its use at first, but inasmuch as no other remedies were prescribed at the same time in the cases referred to, nor even rest enjoined, I was inclined to give witch hazel the credit. Other uses for which Ringer recommends its trial are pulmonary hemorrhages, hæmatemesis, and varicocele.

#### Boracic Acid Oil in the Treatment of Burns.

In the *Brit. Med. Jour.*, December 20, 1884, Dr. C. J. Bond says it is now a year since he began to use boracic acid oil as a dressing for burns at the Leicester Infirmary, at first simply in the form of a mechanical suspension of the powdered acid in olive oil. He has found that 18 grains of powdered boracic acid dissolved in a drachm of hot glycerine, and added to an ounce of olive oil, forms a kind of imperfect emulsion, the glycerine retaining the acid in solution when cold. This can be easily shaken up with the oil. This makes a non-irritating and doubly antiseptic dressing, and extensive burns treated thus, and covered with a layer of some antiseptic wool, require to be disturbed but seldom, and if not perfectly aseptic, are far "sweeter" than when dressed with, for instance, the carron oil.

As a lubricant for catheters, sounds, etc., this boracic oil with glycerine possesses advantages. It is superior to olive oil, because of its antiseptic property; and better than carbolic oil, because it is less irritating and much more stable; boracic acid being non-volatile. Glycerine itself, too, is a dressing of considerable value by virtue of its dehydrating power.

#### A Contribution to the Clinical Study of Rotheln or German Measles.

It appears to be a somewhat general opinion that Rotheln, or as it is not infrequently called, German measles, is a disease of such minor importance as to be unworthy of scientific research; but a disease, the victims of which succumb as early as the fourth day, must be of sufficient importance to demand our attention and the best efforts of our armamentarium.

Dr. W. A. Edwards, during the winter and spring of 1881-2, studied in the Philadelphia Hospital over one hundred cases of the disease, and the results of his observation he details in a valuable clinical paper in the October number of *The American Journal of the Medical Sciences*.

As regards the diagnosis, he says the eruption appearing on the third day, first in the face, its

rapid extension, its gradual shading off into the surrounding skin, its elevation, more particularly in the centre of the patch, which is also the brightest in color, together with the fact that desquamation first shows itself there, are all points, which, as far as the eruption is concerned, render the diagnosis plain; furthermore, the rash almost at once occupied whole the body, and never presented a crescentic outline.

#### Hydrochlorate of Apomorphine.

In *Squibb's Ephemeris* for November, 1884, we read that hydrochlorate of apomorphine is one of the new preparations of the present Pharmacopœia, but it is very little used and of doubtful general utility. The two principal objections to it are, first, that it is uncertain, harsh, and dangerous in its action, and probably has as many casualties charged against it, considering its limited use, as any remedy proposed within the past fifteen years. Secondly, it is unstable in composition, and especially liable to change, and becomes partially or wholly inert by keeping.

Its single point of value seems to be that it is a prompt, though not very certain emetic, whose action is said to be directly upon the nervous centres, and not reflex. Therefore, when given hypodermically, it will empty the stomach by emesis, provided the nervous centres are still sensitive to its action. This peculiarity of action is supposed to adapt it to the evacuation of all poisons from the stomach, except the narcotics in the later stages of their action.

#### Subcarbonate of Iron in Surgery.

In an article in a recent number of the *Journal de Médecine* of Brussels, Dr. Timmermans calls attention to the great advantages possessed by the subcarbonate of iron in the treatment of wounds and ulcers, and especially when these last are chronic, as it causes too much pain as long as any inflammation is present. He regards it as efficacious as iodoform, without its disagreeables and dangers. In recent wounds it arrests hemorrhage and hastens cicatrization, and recent ulcers due to excoriations or contusions are rapidly healed. After the ulcer has been washed and dried, its surface and edges are covered with a layer of the powder from one to three millimetres in thickness, over which is placed a pledget of charpie or lint, and a bandage. During the first days the dressing is renewed from two to three times a day, according to the amount of discharge. Care must be taken not to allow of accumulations of pus, it

being necessary that the iron should be in direct contact with the ulcerated surface.

#### Nerve Suture and Excision of Bone.

The following novel operation was recently performed by Professor Von Bergmann in the Royal Clinic at Berlin:

A boy, aged 15, was brought there, who, in June of last year, had been severely wounded in his right upper arm by a circular saw. The wound had healed up in about ten weeks; but the boy had lost all power of motion, and all sense of touch, in his right arm and hand. It was supposed that the nerves of the upper extremities had been severed; and, in order to reconnect them, the scar was reopened, and the ends of the nerves uncovered. As it was impossible to join them as they lay, a piece of the humerus, two inches long, was sawn off. The two ends of the nerve were then joined, and it is hoped that the boy will recover the use of his arm and hand.

#### A Uterus Exhibiting the Results of Trachelorraphy.

To a recent meeting of the West London Medical-Chirurgical Society (Oct. 3), Dr. Imlach showed this specimen from a patient who died of cancer of the stomach four months after performance of the operation of trachelorraphy in the Hospital for Women. Before operation there was deep bilateral laceration, and the cavity of the uterus measured  $3\frac{1}{2}$  inches. At the time the speaker received the specimen, the cavity of the uterus had diminished to  $2\frac{1}{2}$  inches, thus showing, as he claimed, the beneficial results of the operation. He next showed a fibrous tumor, from the vaginal wall, and remarked that such tumors were very rare, they not being even mentioned by either Edis or Thomas in their works.

#### Hazeline in Menorrhagia.

In the *Practitioner*, August, 1884, p. 141, Mr. M. Chute describes a valuable remedy for menorrhagia, which is a very frequent ailment in women in Cape Colony. Two drachms of hazeline, given twice or thrice a day, will act so quickly that it is not necessary to anticipate the flow; but when menstruation, after it has lasted the ordinary time, is not closing naturally, hazeline, given as above, will effectually restrain it, and after hemorrhage has ceased there is no advantage in continuing the drug. Another good result produced by hazeline is, that it relieves the pain



of dysmenorrhœa in a very quick and marked manner.

#### A Case of Resection of the Pylorus for Carcinoma.

In the October issue of *The American Journal of the Medical Sciences*, Dr. Randolph Winslow, of Baltimore, reports with full details, an unsuccessful case of pylorotomy performed with antiseptic precautions upon a woman aged 42, suffering from carcinoma, who, in her own words, was "dying every day." She survived the operation two hours.

## CORRESPONDENCE.

### An Interesting Case of Dislocation at the Knee.

EDS. MED. AND SURG. REPORTER:—

November 6, 1884, I was hastily called to see Walter Duncan, æt. 6, who, while in his "high chair," turned it over, the entire force of the fall being on his right foot.

I found him suffering greatly; the leg flexed almost to a right angle upon the thigh, and held so by clonic contractions of the hamstring muscle. Using some force, the limb was straightened, and I readily diagnosed dislocation of the tibia forwards. The patella lay in a depression just above a protuberance—the head of the tibia—and could be readily raised in the fingers. The condyles pressed hard into the popliteal space. The limb was three-fourths of an inch shorter than its fellow, and at once returned to its position of right angle to the thigh upon its release.

It was readily reduced over my knee, coming into place with a slight snap. It was placed upon a posterior splint with a foot-piece, by means of which slight extension was made, and bathed with a solution of lead-water and laudanum to allay inflammation, which, for three days, ran high, necessitating the use of morphine to control the pain. At the end of twelve days the posterior splint was removed, and a "Bavarian" plaster splint applied. Passive motion was begun the same day. The patient was able to walk with the aid of crutches at the end of the third week, and at the end of the fourth the splint was thrown aside and the knee encased in a laced knee-cap, which he still wears. He at this writing has as good use of this limb as his left, all stiffness having disappeared.

I thought this case worthy of publication, not only because of the rarity of luxations at the knee-joint, but also because it presents two interesting features.

The first of these is the age of the patient. The youngest case on record of which I have knowledge; the next being that of a boy æt. 10, the patient of Dr. White, of Buffalo, N. Y.

The second feature I desire to notice is the position of the limb, that of flexion almost to a right angle, while we would expect dorsal flexion of 30° or 40°. I can account for this only in this way: that there was extensive laceration of the ligaments (a supposition which the subsequent

inflammation confirms), and that the hamstring muscles did not slip over the condyles as they usually do.

SPENCE REDMAN, M. D.

Platte City, Mo.

## NEWS AND MISCELLANY.

### Causes of Death in New-Born Children.

Dr. Nobiling, of Munich, whose labors in forensic medical research have earned him the reputation of a high authority in Bavaria, has recently published in the *Erztliches Intelligenzblatt* a series of contributions on the pathological appearances observed in the bodies of children that have died from asphyxia shortly after birth. He has examined a large series of bodies, and has arrived at the conclusion that the asphyxia often attributed to overlying, and even to obscure pulmonary disease, is too often due to foul play. He is particularly suspicious of extravasations of blood, and sums up his conclusions on that subject. Extensive subcutaneous extravasations could always be traced by Dr. Nobiling to external violence, including such as might be received in protracted and instrumental labor, and attempts to restore animation. Effusions of blood in the muscles of the neck and along the course of the great vessels are always caused by forcible strangulation. Hemorrhages under the capsule of the liver or in its substance are invariably the result of external pressure, and so are lacerations of the peritoneum, liver, spleen, and kidneys. These injuries are by no means rare results of violent attempts to promote respiration, and Dr. Nobiling has traced them also to rough and clumsy handling of a new-born infant by male relatives or incompetent nurses. Hemorrhages in the tissues of the umbilical cord are very rarely caused by the mechanical forces of labor, or even by artificial replacement of the prolapsed cord; they generally result from firm manual pressure on the cord, or from intentional laceration. Circumscribed collections of blood under the scalp or integuments may be either due to mechanical labor, or to many other kinds of external violence; the same applies to hemorrhages in the substance of the lips, tongue, palate, and pharynx, which are always traumatic. Bleeding from the external auditory meatus and extravasations behind the ear are also the results of violence, not disease. Dr. Nobiling has often found a portion of the fluid or solid material which caused the infant's death in the nasal fosse, mouth, larynx, trachea, bronchi, pulmonary vesicles, œsophagus, stomach, tympanum, or Eustachian tube, sometimes in only one of these anatomical structures and regions. When blood is found lying free in the same parts, it may have proceeded from the infant's nose, or have entered its mouth during parturition, being of maternal origin. The principal lesson to be learnt from the researches of Dr. Nobiling is that all internal and intestinal extravasations of blood in the body of an infant are to be regarded with suspicion, and to be considered as traumatic, being due to violence causing visceral injury, or complete and sudden asphyxia.

**THERAPEUTICAL NOTES.****Crystal Pepsin.**

The surgical value of pepsin as a dissolvent is well shown in a note in the *Northwestern Lancet*. The editor of that journal states that he was once called upon to relieve the distress occasioned by a bladder distended with clotted blood. He injected a scruple of Jensen's crystal pepsin in an ounce of warm water, and had the satisfaction of seeing the patient pass a full stream of urine and disintegrated blood, in less than twenty minutes.

**Peptonized Cod-Liver Oil.**

This valuable form of cod-liver oil is prepared by Messrs. Reed & Carnrick, of New York city. It is a combination of pure cod-liver oil and condensed milk digested, the oil being artificially prepared for assimilation with nature's emulsifier—pancreatine, instead of gums, alkalies, Irish moss, and water. It will keep indefinitely, having been tested for over a year at a decomposable temperature. It is prepared with milk and also with hypophosphite of lime and soda.

We observe that among the food products exhibited at the International Health Exhibition, London, 1884, from the United States, were *beef peptonoids* and *maltine*, products of the same firm. Both of these preparations carried off the gold medal and highest award against numerous competitors in their respective classes. All food preparations were critically analyzed at this Exhibition by a jury composed of the best chemists in the country.

**Medicinal Wines.**

For medicinal purposes the pure Hungarian wines imported by Mr. L. Reich, of New York, have stood the test of years, and deserve the highest encomium. He makes his selections with intelligent and conscientious care.

**Supervision of Noxious Trades.**

Before the Society of Medical Officers of Health (England), November 21, 1884, Mr. Alfred Spencer, of the Metropolitan Board of Works, read a paper on this subject. He referred, in the first instance, to the effect of the Metropolitan Building Act of 1844, section 55 of which prohibited the erection of any dwelling within fifty feet of a building used for the business of a blood-boiler, bone-boiler, fellmonger, soap-boiler, tallow-melter, tripe-boiler, slaughterer of cattle, sheep, or horses, and any other like business, offensive or noxious. It was also forbidden to carry on any such business within forty feet of any public way, and fifty feet of a dwelling; and any existing business of this character, within these distances, was to be abandoned at the end of thirty years. By themselves, these causes would have led to the abolition of such places within thirty years, but a later section gave the justices power to mitigate the penalty, provided the best means were adopted for preventing nuisance. In 1874 an Act was passed which repealed the last sections, and thus certain businesses came to be prohibited; while others could only be established by consent of the local authority. The Metropolitan Board of Works, under this Act, made regulations for slaughter-houses, which had been very beneficial in their operations, and as many as

620 out of 1,429 had been abolished. Offensive businesses were mostly situated in Bermondsey, in Belle Isle, Islington, and in Southwark. A second set of by-laws under this Act dealt with the business of a blood-boiler, a bone-boiler, a manure-manufacturer, soap-boiler, and tallow-melter. The means for preventing nuisance in these businesses was stated in detail, and Mr. Spencer then commented on the qualifications necessary in the inspector for influencing the masters and men engaged in them. A short account was then given of trades dealt with by the Alkali Works Regulation Act of 1881, which includes within its operations works for sulphuric acid, for gas-liquor, for nitric acid, and sulphate of ammonia. The supervision of these businesses was in the hands of inspectors appointed by the Local Government Board. Other businesses were then briefly considered, such as brick and ballast burning, cement-making, etc.; and, in conclusion, Mr. Spencer alleged that the London of today was far more free from nuisance resulting from trades, in consequence of the restrictions under which they were placed.

**Specimens of Irish Sanitation.**

From a foreign exchange we learn that the following are a few from many excerpts which illustrate the way in which the Irish Local Government Board administers the sanitary law under its control. We may remark that the state of affairs here recorded is to be found in one of the premier towns of Ireland, and much worse is to be found elsewhere throughout the country. At the last meeting of the Carlow Town Commissioners, Dr. O'Meara, medical officer of health, reported the existence of a number of nuisances, including an accumulation of manure and filthy material in a lane. He found nuisance dangerous to health, caused by the occupier keeping a donkey in the back room of his dwelling-house, and pig manure and other nuisance in his yard. A similar report in the case of John Rafter, who kept five pigs in his dwelling, was made. The following report was also read: "I inspected the ten houses. These houses consist of one room each, which serves as bed room and living room. At the rear are two privies, which are a mass of filth and abomination, and are supposed to serve as privy accommodation for the ten houses. In the yard there is a pool of fetid, stagnant water, in addition to other filth. I am of opinion that it is impossible for healthy conditions to exist in a single room used for all purposes of eating, drinking, sleeping, and cooking." The following was read from Dr. Bolton: "I beg leave to state that as a rule dwellings are most unsatisfactory, particularly in the Newtown district, where, I may say, they are without exception unfit for human habitation, and in many instances life is shortened from the effects of the poisonous fumes arising from the coal of the locality being consumed in cabins without chimneys, or with very imperfect ones. I have condemned cabins in the Newtown district on former occasions, and they were closed, but after a short time the occupiers again got possession, and some of them are still existing in the dwellings."

**Germany on Vaccination.**

From the *Lancet* we learn that the German Commission appointed to inquire into the subject of vaccination has, with the exception of the three members opposed to vaccination, unanimously declared for vaccination with humanized lymph rather than with that from the calf. At the present moment we do not know upon what grounds this preference depends, but we assume that the fact is recognized that *direct* vaccination—i. e., vaccination with lymph which is not stored—"takes" far better, and therefore gives much more protection against small-pox than vaccination with stored lymph. Vaccination with calf lymph throughout the country must necessarily be performed with stored lymph; but direct arm-to-arm vaccination with humanized lymph is a possibility everywhere. Calf-lymph has its use in enabling practitioners to renew their stock, and also in giving opportunity for the direct vaccination of numbers of persons in large centres of population. If in future it can be found that calves can be inoculated with small-pox virus and the virus modified by such transmission through the animal, it is probable that the use of calf-lymph will serve this purpose more than heretofore.

**Indianapolis Academy of Medicine.**

The Marion County (Indianapolis) Academy of Medicine, at their regular meeting, Tuesday evening, January 6, 1885, elected the following officers for the year 1885:

*President.*—Thomas N. Bryan, M. D.

*Vice-President.*—Alenbert W. Brayton, M. D.

*Secretary.*—Ferree W. Frank, M. D.

*Assistant Secretary.*—Joseph O. Stillson, M. D.

*Treasurer.*—T. M. Rome, M. D.

The following gentlemen were elected as censors:

Dr. F. S. Newcomer, Dr. L. L. Todd, Dr. Geo. Cook, Dr. E. Hadley, Dr. R. E. Hampton, and G. V. Woolen.

The President appointed Drs. T. B. Harry, Brayton, East, Stillson, and Hodges as the Pathological Committee for 1885.

The Society listened to a paper by D. C. Bryan on "Stricture of the Urethra."

**Items.**

—The loneliest doctor in the world is the ophthalmologist who hasn't written an article on cocaine.

—Dr. Kolbe, of Leipzig, whose name is associated with the chemistry of salicylic acid, has recently died.

—Surgeon P. H. Bailhache, of the Marine Hospital Service, has been assigned to duty in Philadelphia.

—"Louis Pasteur: His Life and Labors," containing the life-work of this distinguished savant, has been translated into English.

—A drachm of balsam copaiba to an ounce of white vaseline makes an ointment popular with New York ophthalmologists in treating chronic conjunctivitis.

—The anesthetist's bag should always contain a pair of tongue-forceps, a Fergusson's gag, a scalpel, forceps, and tracheotomy-tube, and a few capsules of nitrite of amyl.

—A child has recently died at Rye, England, from shock to the nervous system, caused by fright at seeing a boy wearing a mask. She lost her reason the first day after the occurrence.

—The publication of the *British Journal of Homoeopathy* has been discontinued, and the editors, Drs. Dudgeon, John Drysdale, and Hughes, are to have a testimonial presented "for their eminent services to homoeopathy."

—The announcement that Dr. R. von Leudensfeld has discovered histological elements having nervous functions in the sponges of the Australian shores, possesses considerable interest for biologists.

—Deep snoring, and an insensitive conjunctiva, are good signs of insensibility, but the most trustworthy one of all is subsultus tendinum of the fingers.

—The Board of Trustees of Columbian University, Washington, D. C., on the unanimous recommendation of the medical faculty, have decided to admit women to the study of medicine in that institution, with all the privileges heretofore accorded only to males.

—The Ohio State Sanitary Association will hold its second annual meeting at Columbus on the 5th and 6th of February. Full information as to the programme, railway rates, etc., may be had by addressing the Secretary, Dr. R. Harvey Reed, Mansfield, Ohio.

—During 1883, the six faculties of medicine in France conferred 662 diplomas of doctor of medicine, viz., Lille 20, Nancy 21, Lyons 43, Bordeaux 44, Montpellier 69, and Paris 465. During the same year 692 diplomas of doctor of medicine were conferred in Germany.

—According to Dr. Woodhouse Braine, in the *Brit. Med. Jour.*, November 29, 1884, to get the full effect of nitrous oxide, it must be given pure, all air being rapidly excluded; and if the patient wear a beard, it had better be wetted, or, what is more effective, have a little soap rubbed on it.

—A museum of hygiene, similar to the Parkes' Museum in London, will shortly be opened at Turin, and extensive purchases in the health department of the Exhibition have been made by Dr. Pacchiotti, who is one of the chief promoters of this useful institution.

—The *Lancet* learns that Dr. Klein and Dr. Gibbes, of the English Cholera Commission, have made a preliminary report in which they express themselves as entirely at variance with Koch. They deny the invariable presence of the comma bacillus in cases of cholera, and have been unable to inoculate the lower animals.

—Making a patient keep his eyes closed while recovering from the ether is a great aid in preventing sickness; for, owing to the patient feeling giddy, any object at which he looks appears to sway from side to side; and this, by itself, is sometimes enough to produce a feeling akin to

sea-sickness, even in those who have not been anesthetized.

—If we wish to avoid sickness after anesthetics, it is of the utmost importance that the patient should not be shaken when being lifted from the operating table to the bed; and if the operation have been performed on the bed, then the bedstead should be allowed to remain without being moved in the least for four hours, as the slightest movement is sometimes enough to start the vomiting.

—At a meeting of the Paris Hospital Medical Society, called expressly to consider the question of the projected admission of women as *internes* of the Paris hospitals, the meeting was addressed by Professor Verneuil in favor of the ladies, and after a brilliant reply by Professor Trélat, the vote was almost unanimously pronounced against the project, there being only four in its favor.

—Before the New York Obstetrical Society, Dr. Henry F. Walker mentioned a case that had come under his observation in which a lady became pregnant for the first time after seventeen years of wedded life. One year after her marriage the os externum was incised, but there had been no subsequent treatment directed to the removal of sterility.

—According to an analysis of the census taken in 1881, there were in all India at that time, among male British-born subjects, 321 "surgeons and physicians," 30 "apothecaries, hospital and medical assistants, and students;" 2 "unqualified practitioners," and 30 "chemists and druggists." Among the native population, in the inclusive class of "physicians, surgeons, and druggists," there were 123,579 males and 75,239 females.

—Local health officers in the State of New York are hereafter to be appointed only after a competitive examination, in accordance with the new civil service rules. The examination papers are to be prepared by an examining board of five physicians, to be designated by the Civil Service Commission, and the examinations are to be held in the presence of a county judge, who will transmit the papers to the Commission.

—The *Medical Press*, December 17, 1884, publishes the following as an excellent pill in chlorosis:

B. Ferri sulph.,	
Sodæ bicarb. ana,	3j.
Pulv. tragacanthi,	gr. vj.
Syrupi,	q. s.

Divide into forty-eight pills, and let one be taken thrice daily. Later, two may be taken instead of one.

—Betz ("Memorabilien") states that the temperature of the bladder, and hence that of the urine contained in it, is affected by that of the surrounding tissues. Therefore, in inflammatory conditions of the pelvic cellular tissue and peritoneum, the patient often complains that her urine feels "hot." If cystitis can be excluded, it is quite probable that this symptom points to some inflammation in the neighborhood of the bladder.

—To a recent meeting of the Pathological Society

of London, Mr. Treves showed a man who presented an extraordinary appearance, owing to a series of deformities, some congenital exostoses of skull; extensive papillomatous growths and large pendulous masses in connection with the skin; great enlargement of the right upper limb, involving all the bones. From the massive distortion of the head, and the extensive areas covered with papillomatous growth, the patient had been called "the elephant-man."

—In the *Æsclepiad*, July, 1884, Dr. Richardson gives a formula for the administration of amyl nitrite by the mouth:

B. Amyl nitrite, pure,	M xxxv.
Ethyl alcohol (sp. gr. 830),	3 v.
Pure glycerine,	3 iss.

To make a mixture of twelve doses. One fluid drachm to be taken in a wineglassful of warm water. In asthma this method is specially recommended.

—The Paris Medical Faculty has lost one of its most brilliant professeurs-agrégés in the person of M. Henninger, who died recently at the age of thirty-four, from tuberculous meningitis. His professorial thesis, on the action of soluble ferments on albuminoids, attracted great attention in the medical and scientific world. By competitive examinations he gained the position of Agrégé Professor of Chemistry in the Medical Faculty, and frequently took the place of the late Professor Wurtz in the professional chair.

—Dr. Lombe Atthill (*Brit. Med. Jour.*, November 29, 1884), says that iodoform, in the shape of slender crayons made up with gum, which can be passed through the cervical canal into the cavity of the uterus, has been recommended in the treatment of some forms of painful menstruation. He has tried it in these cases without much benefit. It may, however be used with advantage in cases in which a fetid discharge issues from the uterus, as is sometimes the case, in some forms of chronic endometritis occurring in elderly women.

—According to Dr. Thomas More Madden (*Brit. Med. Jour.*, November 29, 1884), for any intra-uterine treatment, it is essential, first, that the orifice and cavity of the uterus, if not already sufficiently patulous, should be mechanically expanded for this purpose; secondly, that, whatever application is employed should be brought into actual contact with the true intra-uterine surface. These propositions may appear too self-evident to need notice here. Nevertheless, any failures in intra-uterine medication arise, in nine cases out of ten, from their neglect.

#### QUERIES AND REPLIES.

EDS. MED. & SURG. REPORTER:—

In case of rupture or laceration of the hymen found post mortem ten days after death, the segments being capable of complete reconstruction, so as to restore the hymen to its normal form, there being very slight decomposition, how long before death must the hymen have been ruptured?

B.

[We doubt if any one could accurately answer this, unless he had himself carefully inspected the parts.—EDS. MED. & SURG. REPORTER.]